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Learning DOS
Vers. 5 & 6

Includes
Practice Disk and
Covers 6.1 & 6.2

Step-by-step concepts, exercises, keystrokes & applications

Margaret Brown

DDC Publishing

D9

DDC®

Learning DOS

Margaret Brown

DDC Publishing

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To my children, Sheldon, Sheila, and Miles
who are a constant source of enjoyment.

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About This Book

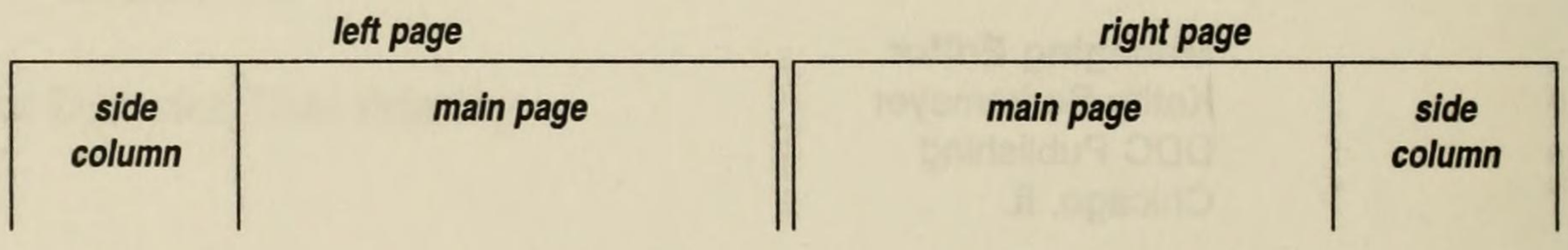
Learning DOS is a beginning DOS book. It introduces you to the most common DOS commands and tasks which will get you up and running with DOS. The book walks you through each new DOS command or task one at a time, step by step, omitting unnecessary DOS jargon. **Learning DOS** contains eight lessons with 15 topics, 89 exercises, and 31 worksheets.

Learning Disk

At the heart of **Learning DOS** is the *Learning Disk* that accompanies the book. Using DOS commands, you will quickly learn to manipulate the files and directories contained on the *Learning Disk*. You will learn hard disk management concepts from the safety of a floppy disk.

Page layout

Most pages have a side column on the outside that includes the exercise number and name (easy to spot) and various support information, while the main part of the page contains *exercise instructions* and *DOS concepts*. Facing pages are illustrated below:



Topics

Topics teach basic DOS concepts through easy-to-understand explanations and illustrations. There are 10 topics in Lesson 1 and one topic at the beginning of Lessons 4 through 8 each.

Lessons

- Lessons consist of short, task-oriented, step-by-step **exercises**.
- **Practice exercises** at the end of each lesson review and repeat the concepts covered in the lesson.
- Reinforcing **worksheets** at the end of each lesson review DOS terms, concepts and commands.

Exercises

- Each exercise walks you through the steps to perform a DOS command or task.
- Each DOS command or task is defined.
- Each exercise lists objectives.
- Exercise instructions are shown in the main page.
- Exercise steps are clearly numbered.
- Results of exercise steps are explained and/or illustrated where appropriate.
- Occasional notes explain concepts within the exercise steps.
- Tasks that are reviewed often refer you to specific pages for more information.
- New terms are defined in the side column.
- Warnings, important comments, and notes appear in the side column.
- "STEPS to" in the side column list the *general* steps necessary to perform the exercise command or task.

Exercise Results

The results of exercise steps are explained and/or illustrated immediately after a command, so you have instant feedback. To conserve space when illustrating the results, unimportant portions of results are sometimes omitted. A series of X's in a *result* indicates data in a result that may be different on your system.

Solutions

- Appendix H provides *solutions* for a few exercise steps that have sizable review sections.
- Appendix I provides *solutions* to the Practice Exercises.
- Appendix J provides *solutions* to the Worksheets.
- Appendix K provides a check-off list for printouts and worksheets so you can keep track of your progress.

Assumptions

- It is assumed that you can provide a blank disk that matches the Learning Disk in size and density.
- It is assumed that your computer has a *hard disk* which is named C:.
- It is assumed that your computer has DOS 5 or DOS 6 installed correctly on drive C:.
- It is assumed that the path to the DOS directory is in the PATH statement of your AUTOEXEC.BAT file.

  NOTE: When DOS 5 or 6 was installed, a ***path*** *to the DOS directory (that holds* ***external DOS commands****) was automatically written into the PATH statement of your AUTOEXEC.BAT file located on drive C:. Whenever an* ***external*** *DOS command is issued, DOS looks for that command in the DOS directory. Each external DOS command in this book is noted. If for some reason the external command cannot be accessed, we offer our best suggestion for a possible solution.*

If your system is different, you need to make appropriate accommodations.

Conventions

- Exercise names shown in upper case identify DOS commands; those in lower case denote DOS tasks.
- Every action in the exercises starts with a bullet (•) and a **bold** action word.
- Commands that you type in exercises are shown in upper case for consistency and easy identification. (You can use either uppercase or lowercase letters, or a combination when issuing DOS commands.)
- Filenames and directory names are shown in uppercase in this book.
- ↵ refers to the **Enter** key.
- Keys that should be pressed simultaneously have a plus (+) between them. For example, Ctrl+→.
- Keys that should be pressed in succession are separated by commas. For example, Alt, F, X.

Read Me First!

About the Learning Disk

- The Learning Disk that comes with this book should fit in your computer's **disk drive A:**.
- The disk that comes with this book is a *high density* 3½" disk (1.44MB) (unless you ordered this book directly from DDC Publishing and indicated the disk size you require).
- **If disk drive A: on your computer system is a 5¼", you will be sent a free 5¼" Learning Disk if you call this toll-free number: (800) 528-3897.**

  OR

- **Appendix M has instructions to make a 5¼" Learning Disk by using your 3½" Learning Disk, IF your computer system has a 5¼" disk drive A: and a 3½" disk drive.**
- **Getting started if your disk drive A: is not 3½" but your system has a 3½" disk drive.**
  - There are two reasons for using disk drive A: when working through this book.
    1) Directions throughout this book instruct you to use disk drive A:
    2) At the end of Lesson Seven, you are instructed to make the Learning Disk a system disk and boot the computer system with it. This can be done only from drive A:.
  - Nevertheless, if your system's disk drive A: is 5¼", and if your system has a disk drive B: that is 3½", then you can still get started on this book while you wait for the new Learning Disk if you:
    1) use the Learning Disk in disk drive B:, and
    2) remember to substitute disk drive B: for disk drive A: every time the book refers to disk drive A:.
- When you get to Lesson Three you will need to provide a blank disk that matches the Learning Disk in size and density.

Reference material

Learning DOS can be used as a reference when you complete it. You can look up the task you want to perform, review it if needed, and then apply the general *STEPS to* perform DOS tasks to your specific situation. The appendixes listed below offer different ways to reference DOS.

- Appendix A contains a list of DOS commands with short definitions.
- Appendix B contains a list of common DOS error messages with causes and solutions.
- Appendix C contains a list of DOS commands that are categorized in different ways.
- Appendix D contains a list of DOS 6.2 changes that affect exercises in this book.
- Appendix E contains a list of DOS commands and tasks and their definitions covered in this book.
- Appendix F contains a list of *STEPS to* perform DOS commands and tasks in this book (in sequential order).
- Appendix G contains an index of *STEPS to* perform DOS commands and tasks in this book (in alphabetical order).

The glossary defines terms used in this book.

Quick Reference Guide. DDC Publishing publishes a "Quick Reference Guide for MS-DOS **5**" and "Quick Reference Guide for MS-DOS **6**" both by Karl Schwartz. These reference guides are designed to help you master DOS commands without searching through lengthy manuals. Step-by-step directions show you how to perform DOS procedures. These *Quick Reference Guides* are good companion books for Learning DOS. Look for DDC Quick Reference Guides in bookstores or call DDC at (800)528-3897.

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TOPIC 1

Computer system, hardware

OBJECTIVE:

- identify and define the hardware parts of your computer system

- Terms and Notes -

hardware
The group of parts that make up the computer system. Hardware can be seen and touched.

computer
An electronic device that performs complex tasks at high speed and with great accuracy. There are two main parts of a computer—the *processor* and the *memory*.

processor (CPU)
The part of the computer that processes the instructions that are in memory.

memory (RAM)
The area of the computer that holds instructions (programs) and information you give it. When you turn the computer off, everything in RAM disappears.

read-only memory (ROM)
A chip that holds information that cannot be changed.

disk drive
A mechanical device that you use to transfer information back and forth between **memory** and a disk.

floppy disk
A magnetically coated disk on which information can be stored and retrieved. Floppy disks are inserted into and removed from the floppy disk drive.

hard disk
A large-capacity storage area that offers fast access to store and retrieve information. The hard disk is enclosed in a unit that you do not handle.

monitor
A screen that displays the information in the computer. Also called *display screen*, or *video display terminal* (VDT).

keyboard
A device that is used to enter data into and issue commands to the computer.

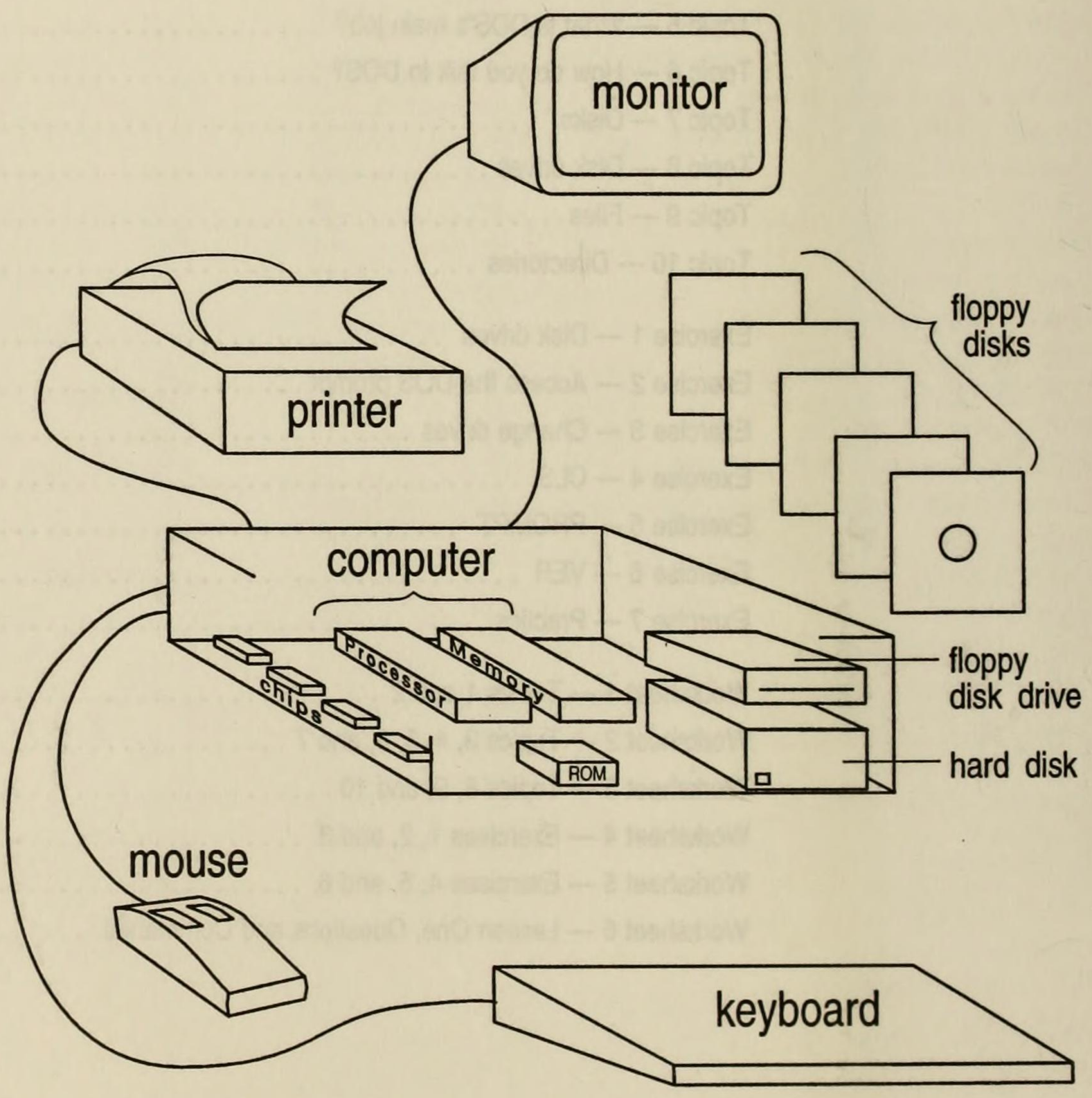
printer
A device DOS sends data to so that it can be printed.

mouse
A small, hand-held device you use to control a pointer on the screen.

Your computer's hardware system

The computer system is your assistant. It has its own
- brain (**processor** or *central processing unit—CPU*),
- workspace (**memory** or *random access memory—RAM*),
- built-in instructions (**read-only memory chips**—*ROM*),
- file cabinets (**disk drives**), and
- storage medium (**hard disk** and **floppy diskettes**).

Your computer comes with a
- **monitor** (to show you what is going on),
- **printer** (to **print copies** of documents),
- **keyboard** (so you can enter **commands** and **data**), and a
- **mouse** (so you can control a pointer on the screen).



Typical Computer System

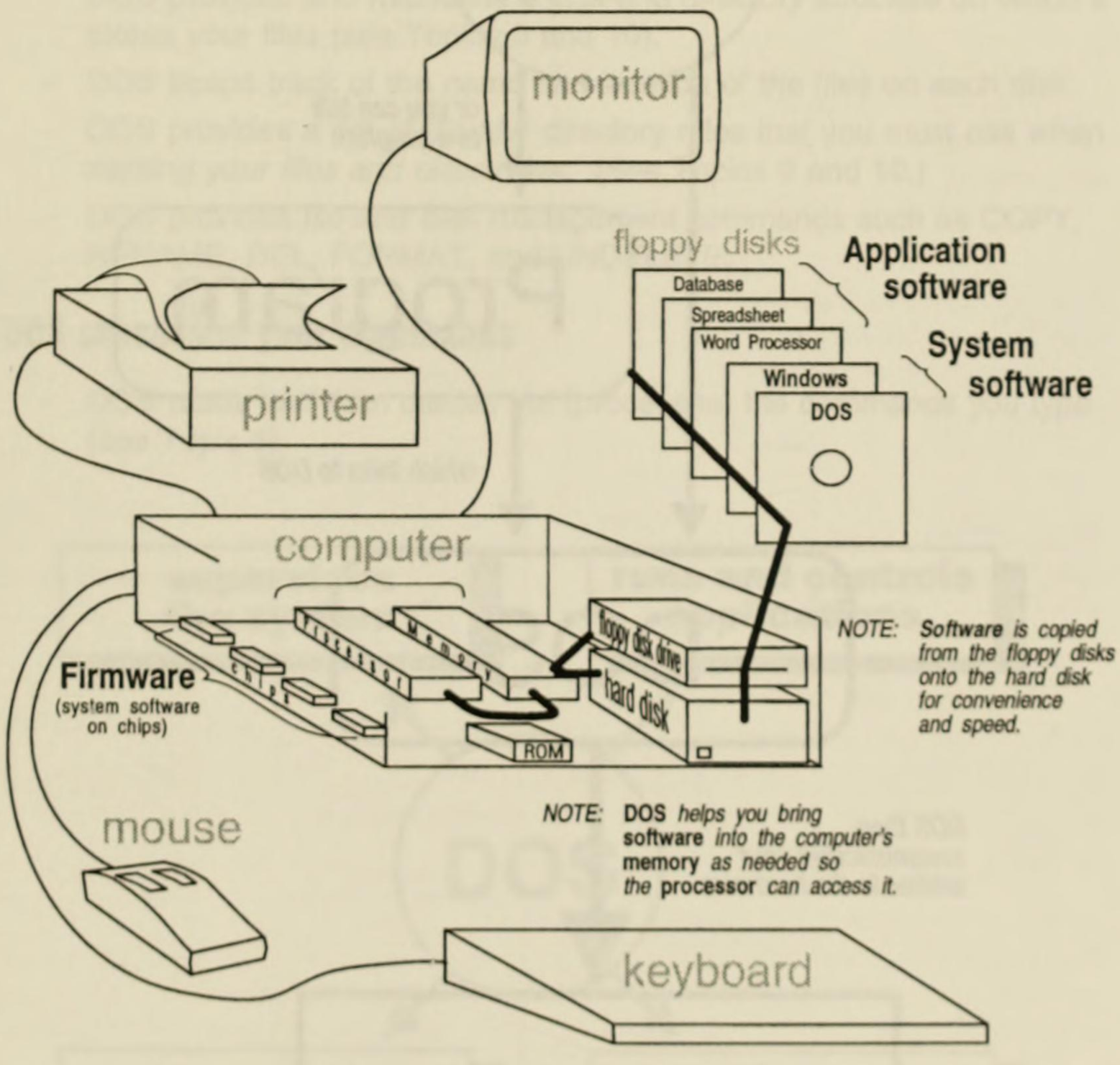
What runs your computer system?

Your assistant is missing something, however. Its **memory** is empty. The computer can do nothing until it is given instructions—**software**. **Software** is a *set of instructions* that tells the computer what to do. There are two main kinds of **software**:

- *application software* (programs) and
- *system software* (firmware and DOS – Disk Operating System).

Software is an essential part of your computer system, and **DOS** is the *most important* **software**. **DOS** controls all the parts of the computer system (more about DOS in the next few sections).

While **software** (including DOS) comes on **floppy disks** originally, this book assumes that your computer system has **DOS** and some programs already copied onto the hard disk.



Typical Computer System, software

TOPIC 2
Computer system, software

OBJECTIVES:

- identify software
- identify two main kinds of software
- identify DOS (Disk Operating System)

– Terms and Notes –

software
Instructions that tell your computer how to perform a task. Software is stored on disks in program files (see Topic 9). Software cannot be seen or touched. There are two main kinds of software:

- *application software* and
- *system software.*

application software (program)
Software that does a specific task, such as word processing.

system software
Software that runs the computer system.

firmware
System software that is built into the computer system on ROM chips.

DOS (Disk Operating System)
A special kind of *system software* that is stored on the hard disk. DOS acts as a link between *application software* and the computer's hardware. **DOS** must be in the computer's memory before *application software* can be used. DOS performs many basic tasks such as disk and file management.

TOPIC 3

What is DOS?

OBJECTIVE:

- identify how DOS connects the parts of the computer system, including you (the user), programs, and hardware

– Terms and Notes –

you (user)
The controller of the computer system (its software and hardware).

program
A set of instructions that your computer carries out to perform a specific task, such as word processing.

DOS
System software that links you and your programs to the computer's hardware.

hardware
The physical parts of your computer system – processor, memory, disks, disk drives, keyboard, monitor, etc.

NOTE: You can use your computer without knowing much about DOS, because the programs you use are written with instructions on how to talk to DOS. However, in this book, you will learn how to talk to DOS directly.

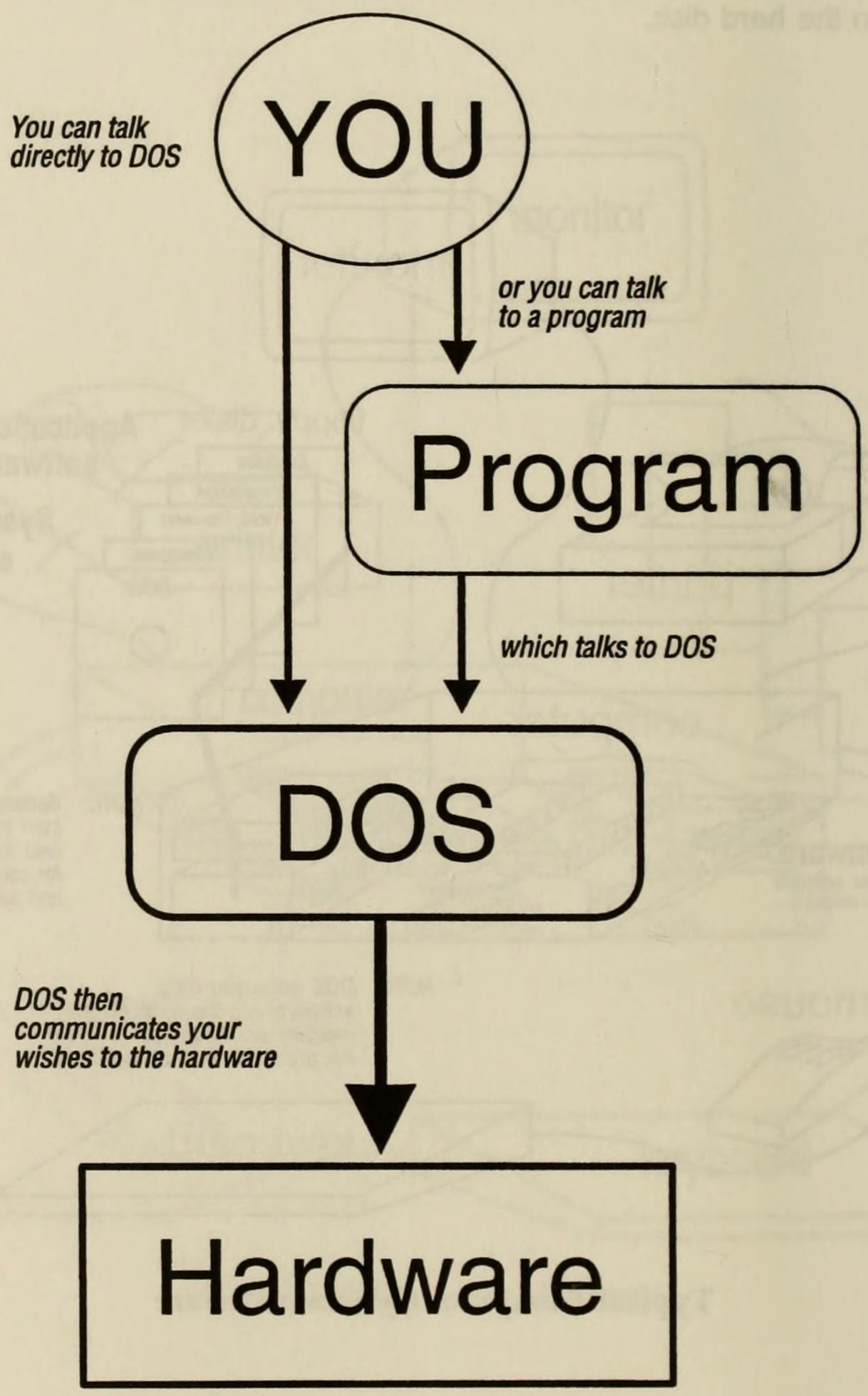
NOTE: Programs sometimes send commands directly to your hardware without your direct command.

DOS is the link between you and your computer

DOS is *system software* that acts as a link between you (or a program) and **hardware**.

DOS (rhymes with toss) stands for *Disk Operating System*. The most popular **DOS** today is **MS-DOS®** (Microsoft Disk Operating System). **PC-DOS®** is an IBM® version of **DOS**. Some other computers have their own version of DOS also.
MS-DOS and PC-DOS, as well as some other versions of DOS, run on IBM and IBM-compatible personal computers.

You can talk either directly to **DOS** or to a **program** which talks to **DOS**. **DOS** then passes your wishes on to the **hardware**.



DOS supervises your computer system

- DOS supervises all of your computer's devices such as memory, disk drives, the monitor, the keyboard, and the system clock.
- DOS watches these devices for events, such as typing at the keyboard.
- DOS also reports problems (as error messages) it encounters with devices, such as when there is no room in memory for a program or when the surface of a disk is defective.

DOS runs and controls your applications

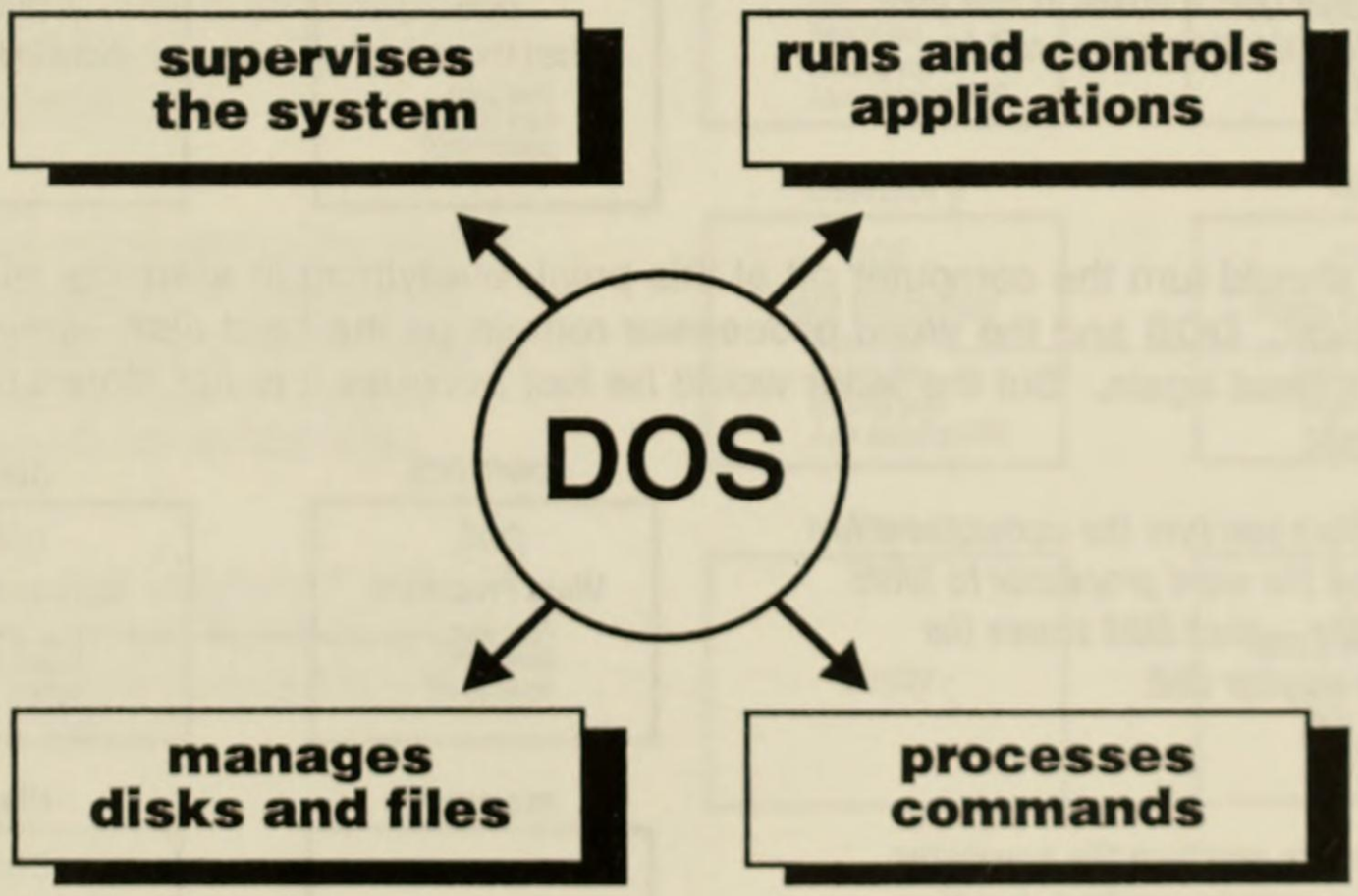
- DOS *loads* and runs your applications such as a word processor when you enter the application's name (see Topic 6).
- DOS manages memory use while programs are running.
- DOS saves and retrieves your data files for your programs.

DOS manages your disks and files

- DOS provides and maintains a *disk and directory structure* on which it stores your files (see Topics 9 and 10).
- DOS keeps track of the name and location of the files on each disk.
- DOS provides a set of file and directory rules that you must use when *naming your files and directories*. (See Topics 9 and 10.)
- DOS provides file and disk management commands such as COPY, RENAME, DEL, FORMAT, and UNDELETE.

DOS processes your commands

- DOS reads and then carries out (processes) the commands you type (see Topic 6).



TOPIC 4

What does DOS do?

OBJECTIVE:

- identify the four kinds of tasks that DOS performs

- Terms and Notes -

loading applications
When you type the name of a program at the DOS prompt, DOS looks for that program file on your disk. If DOS finds the program file, it copies (loads) it into memory and starts the program.

disk and directory structure
A file storage system that provides for the creation of directories for the organization of files on disks.

NOTE: The DOS rules for naming files and directories are common to all the applications you will use.

NOTE: You will discover that most DOS commands have one of two primary purposes:

- file management
- disk and directory management

TOPIC 5
What is DOS's main job?

OBJECTIVE:

- identify how DOS moves information and programs between *memory* and a *disk* (in this example, the hard disk)

- Terms and Notes -

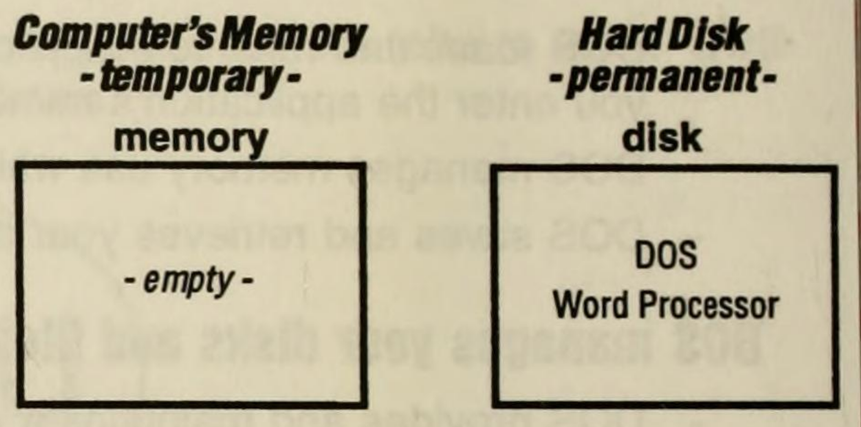
booting
To begin the computer's start-up process, and load DOS into the computer's memory.

Moving data between memory and a disk

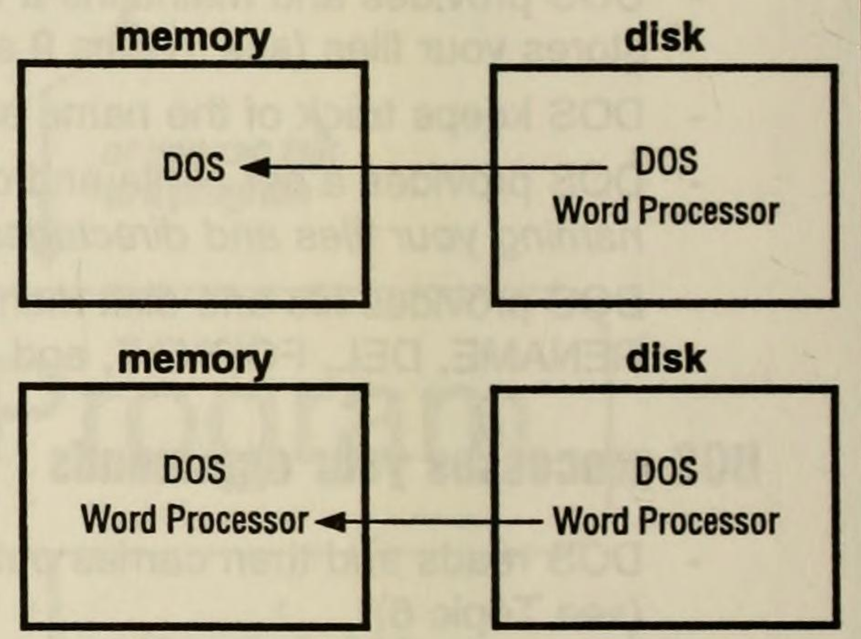
One of **DOS**'s most important jobs is to *move information* back and forth between the **computer's memory** and **disks**. Everything you use in the computer has to be in the **computer's memory**.

The **computer's memory** is called *temporary memory* because when you turn the computer off, everything in the **computer's memory** is lost. **Disks** are called *permanent storage* because when you turn the computer off, information on **disks** stays there.

*With the computer off, the **computer's memory** is empty, but the **hard disk** has information stored on it — **DOS** and a **word processor.***

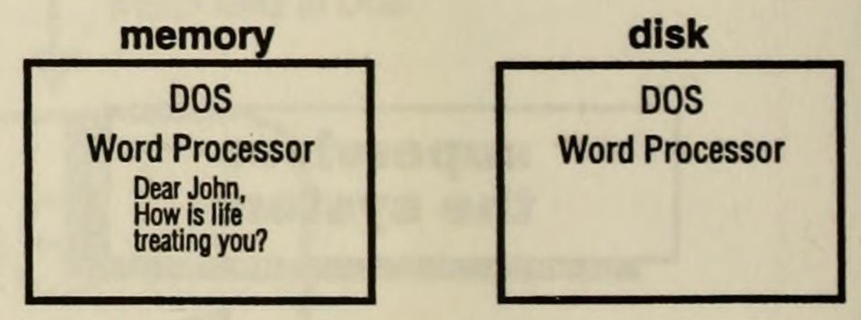


*When you turn the computer on, DOS is automatically loaded into **memory**. This is called **booting** the computer.*



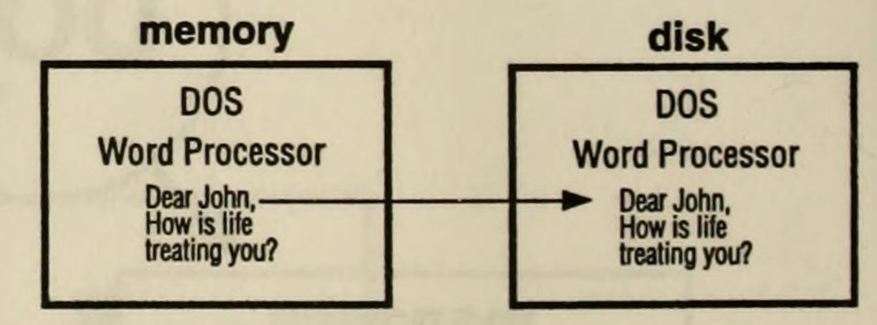
*If you decide to use the word processor, you tell **DOS** to load the word processor's instructions into **memory.***

*When you type a letter, it will go directly into **memory** — not to a **disk**.*



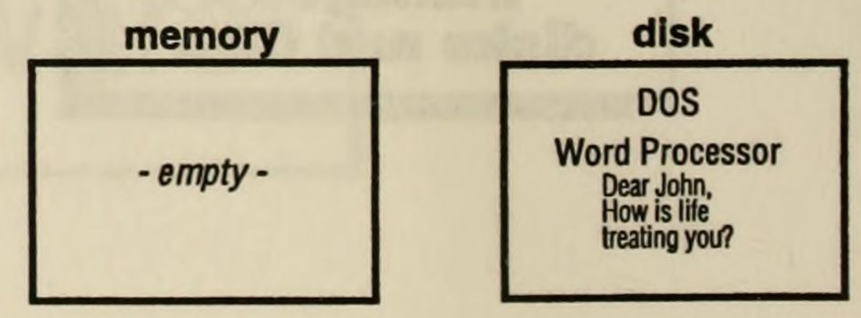
If you should turn the computer off at this point, everything in **memory** will disappear. **DOS** and the **word processor** remain on the hard disk—they can be used again. But the letter would be lost because it is not stored on the **disk**.

*So before you turn the computer off, you tell the word processor to SAVE your file —then **DOS** stores the letter on your **disk**.*



Now when you turn the computer off, memory is emptied, but the information on the disk remains.

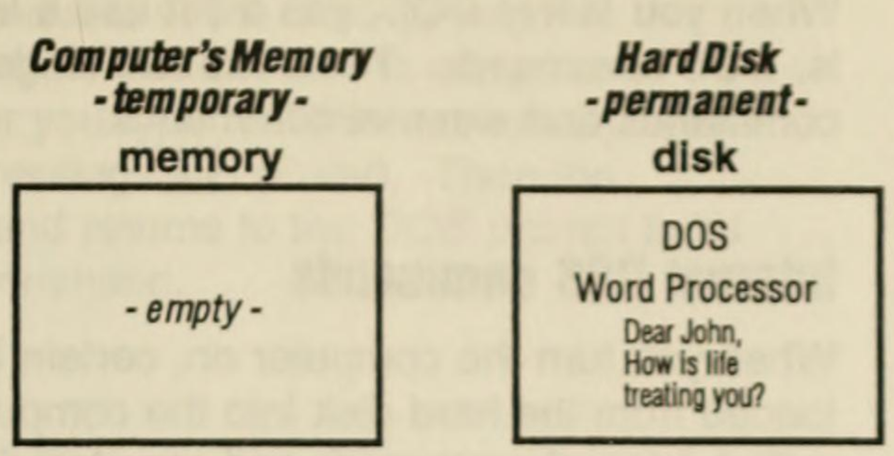
NOTE: Your letter is stored on the hard disk as a file (see Topic 9).



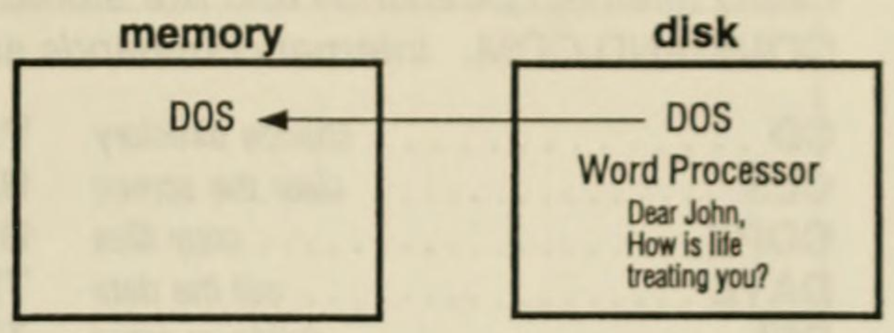
Topic 5 continued...

You decide to make some changes to the letter:

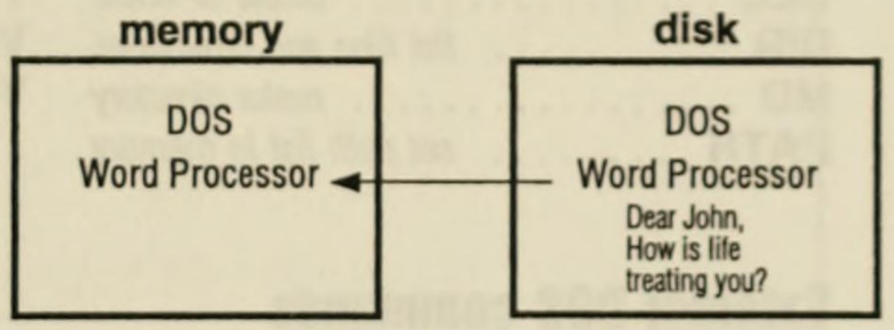
*The computer is off — **memory** is empty, but the **hard disk** has **DOS**, a **word processor**, and your **letter** on it.*



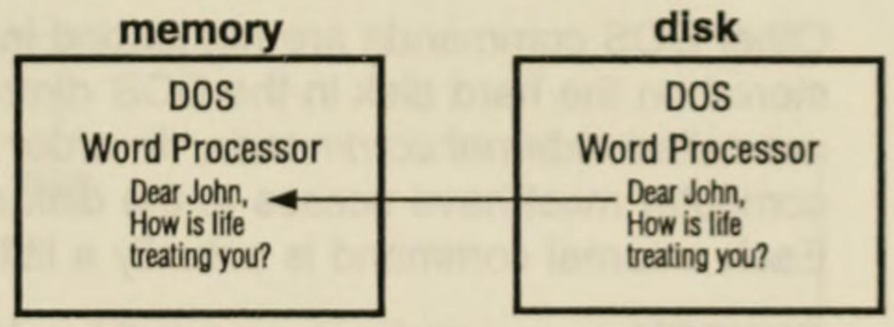
*You turn the computer on, and again, **DOS** is automatically loaded into **memory**.*



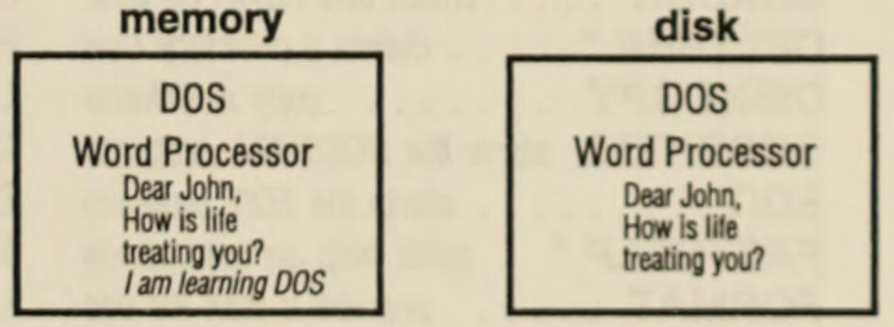
*You tell **DOS** to load the **word processor's** instructions into **memory**.*



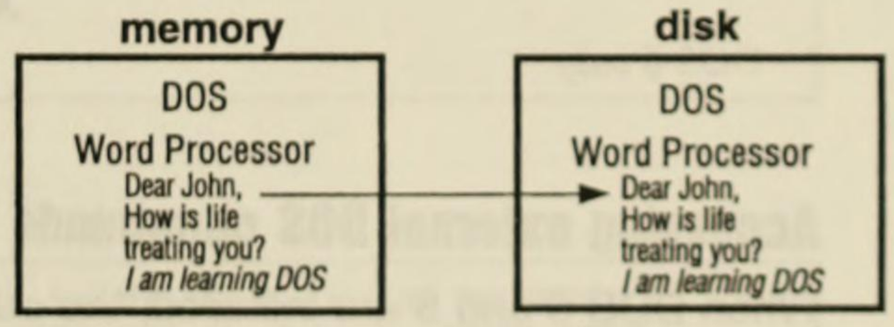
*You tell the word processor to retrieve a copy of your **letter**— then **DOS** moves a copy of the file into memory.*



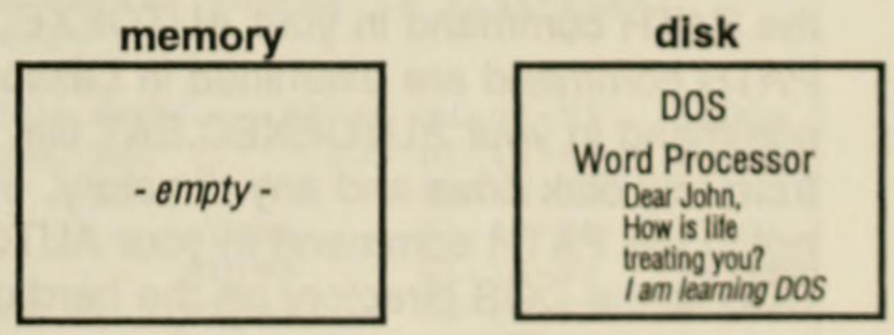
*The changes you make to the letter take place in **memory**, but not on the **disk**. Your original letter, stored on the disk, has not been changed.*



To store your revised letter, you tell the word processor to resave the letter. Then DOS stores the letter on the disk, replacing the original version with the revised letter.



*You turn the computer off, and again, the **computer's memory** is emptied while the **hard disk** retains its information.*



NOTE: When you retrieve information from the hard disk, DOS copies the information to **memory** leaving the information unchanged on the **hard disk**.

TOPIC 6

How do you talk to DOS?

OBJECTIVES:

- identify DOS commands
- identify internal DOS commands
- identify external DOS commands
- identify the DOS prompt and how you use it to issue commands to DOS

- Terms and Notes -

DOS command
A command that tells DOS to carry out a specific action such as list files on a disk.

internal commands
DOS commands that are stored in a file called COMMAND.COM and automatically loaded into the computer's memory. Because they reside in memory, you can execute internal commands at any time.

external commands
DOS commands that are stored in a file and that are accessible only if they can be reached on the disk and directory in which they are stored.

NOTE: The lists of DOS commands on this page show only the **internal** and **external** commands used in this book. For a complete list of DOS commands, see Appendix A.

How do you talk to DOS?

When you *talk* to DOS, you must use a language that DOS understands, that is, *DOS commands*. There are two kinds of DOS commands: internal commands and external commands.

Internal DOS commands

When you turn the computer on, certain DOS commands are automatically loaded from the hard disk into the computer's memory. These commands are called *internal commands* and are stored in a *file* (see Topic 9) called COMMAND.COM. *Internal commands* are always available.

CD . . . . . *change directory*
CLS . . . . . *clear the screen*
COPY . . . . . *copy files*
DATE . . . . . *set the date*
DEL . . . . . *delete or erase*
DIR . . . . . *list files and directories*
MD . . . . . *make directory*
PATH . . . . . *set path list in memory*
PROMPT . . . . . *change DOS prompt*
RD . . . . . *remove directory*
REN . . . . . *rename a file*
TIME . . . . . *set the time*
TYPE . . . . . *show the contents of a file*
VER . . . . . *display the DOS version*
VOL . . . . . *display disk's volume name*

External DOS commands

Other DOS commands are *not* loaded into the computer's memory, but are stored on the hard disk in the DOS *directory* (see Topic 10). These commands are called *external commands*. In order to use *external commands*, the computer must have access to the disk and directory that they are stored on. Each external command is actually a little program that does a certain task.

CHKDSK . . . . *check and report on disk*
DELTREE * . . . . *delete a directory tree*
DISKCOPY . . . . . *copy a diskette*
DOSSHELL *starts the DOSSHELL program*
EDIT . . . . . *starts the EDIT program*
FASTHELP * . *quick help on commands*
FORMAT . . . . . *prepare a disk for use*
HELP . . . . . *DOS 5 - quick help on commands*
HELP * . . . . *DOS 6 - starts the HELP program*
LABEL . . . . . *name a disk*
MOVE * . . . . . *move files or rename directory*
SYS . . . . . *create a system disk*
TREE . . . . . *list all directories*
UNDELETE . . . . . *restore deleted files*
XCOPY . . . . . *copy directories and their files*

* *DOS 6 only*

Accessing external DOS commands

When DOS 5 and 6 are installed, the *path*, **C:\DOS**, is automatically added to the PATH command in your AUTOEXEC.BAT file (the AUTOEXEC.BAT file and PATH command are examined in Lesson 7). If **C:\DOS** is in the PATH command in your AUTOEXEC.BAT file, you can access *external* commands from any disk drive and any directory. However, if for some reason, **C:\DOS** is not in the PATH command in your AUTOEXEC.BAT file, then you must to point DOS to the DOS directory on the hard disk whenever you use *external* commands. (The next four topics examine *disks*, *disk drives*, *files*, and *directories*.)

Topic 6 continued...

Telling DOS what to do

You tell DOS what to do by typing a command at the **DOS prompt** (C:>\). When the *DOS prompt* is showing, it means that the computer is waiting for you to tell it what to do. After you type a *DOS command*, you tell the computer that you are through by pressing ↵ (Enter). Then the computer performs the *DOS command* and returns to the *DOS prompt* to let you know that it is ready for your next command.

DOS prompt
The signal that the computer is waiting for you to tell it what to do.

DOS prompt ↓

The computer is waiting for you to tell it what to do.

```
C:\>
```

DOS command ↓

*You type a command, for example, **DIR**, then press ↵ (to tell the computer that you are through).*

```
C:\> DIR
```

The computer does what you ask (lists the files and directories on the disk) and returns to the system prompt to let you know that it is waiting for your next command.

```
Volume in drive C is 486 EXPRESS
Volume Serial Number is XXXX-XXXX
Directory of C:\

COMMAND  COM     47845 04-09-91   5:00a
AUTOEXEC BAT       105 01-14-93   6:04p
CONFIG   SYS        75 06-26-92  11:16a
DOS            <DIR>     01-16-92  11:13a
LOTUS          <DIR>     01-16-92  11:34a
WINDOWS        <DIR>     06-26-92  10:55a
WP51           <DIR>     01-16-92  11:36a
MOUSE          <DIR>     01-16-92  11:55a
TYPE           <DIR>     01-13-93   8:52a
       11 file(s)     109612 bytes
                     4978688 bytes free
C:\>
```

↑ *DOS prompt*

TOPIC 7
Disks

OBJECTIVES:

- identify two kinds of disks
- identify floppy disk sizes, densities, and capacities
- identify other differences in floppy disks

– Terms and Notes –

disks
Media on which information is stored and retrieved.

disk capacity
The number of *bytes* a disk can hold.

disk density
Density refers to the surface coating on a disk. The closer together the particles on the disk are, the higher the disk's capacity.

bytes, kilobytes, and megabytes
A *byte* is a unit of measurement.
One *byte* is the amount of space needed to hold one character.
The size of many computer parts are measured in *bytes*:

the computer's memory
file size
disk capacity

kilo means 1,000
mega means 1,000,000

1 byte (b)
= space for one character

1 kilobyte (K)
= about **1,000 bytes**

1 megabyte (MB)
= about **1,000,000 bytes**

write-protect
To use a procedure that will protect a disk from being changed in any way while still allowing you to read the information on the disk.

write-protect tab
A small self-adhesive tab that often comes packaged with disk labels and is used to cover the write-enable notch on a 5¼" floppy disk.

DISK HANDLING TIP (Rule of Thumb):
If you put your right thumb on the disk label when you put the disk in the disk drive, it is likely to be oriented correctly.

Kinds of disks

There are two kinds of disks: *floppy disks* and *hard disks*.

Hard disks are usually enclosed in the computer case and cannot be touched. *Hard disks* have much larger **capacity** than *floppy disks*, usually between 40MB and 300MB.

Floppy disks are put into *floppy disk drives* that are built into the computer. Being able to identify the variety of floppy disks and their different densities is important because certain DOS commands (such as DISKCOPY and DISKCOMP) need to use disks that are formatted to the same **size** and **density**.

Floppy disk sizes and densities

There are two standard floppy disk sizes: **5¼"** and **3½"**. Each of the two disk sizes comes in a variety of densities. The different densities mean that they can be formatted to hold different amounts of information.

The following floppy disks are standard today:

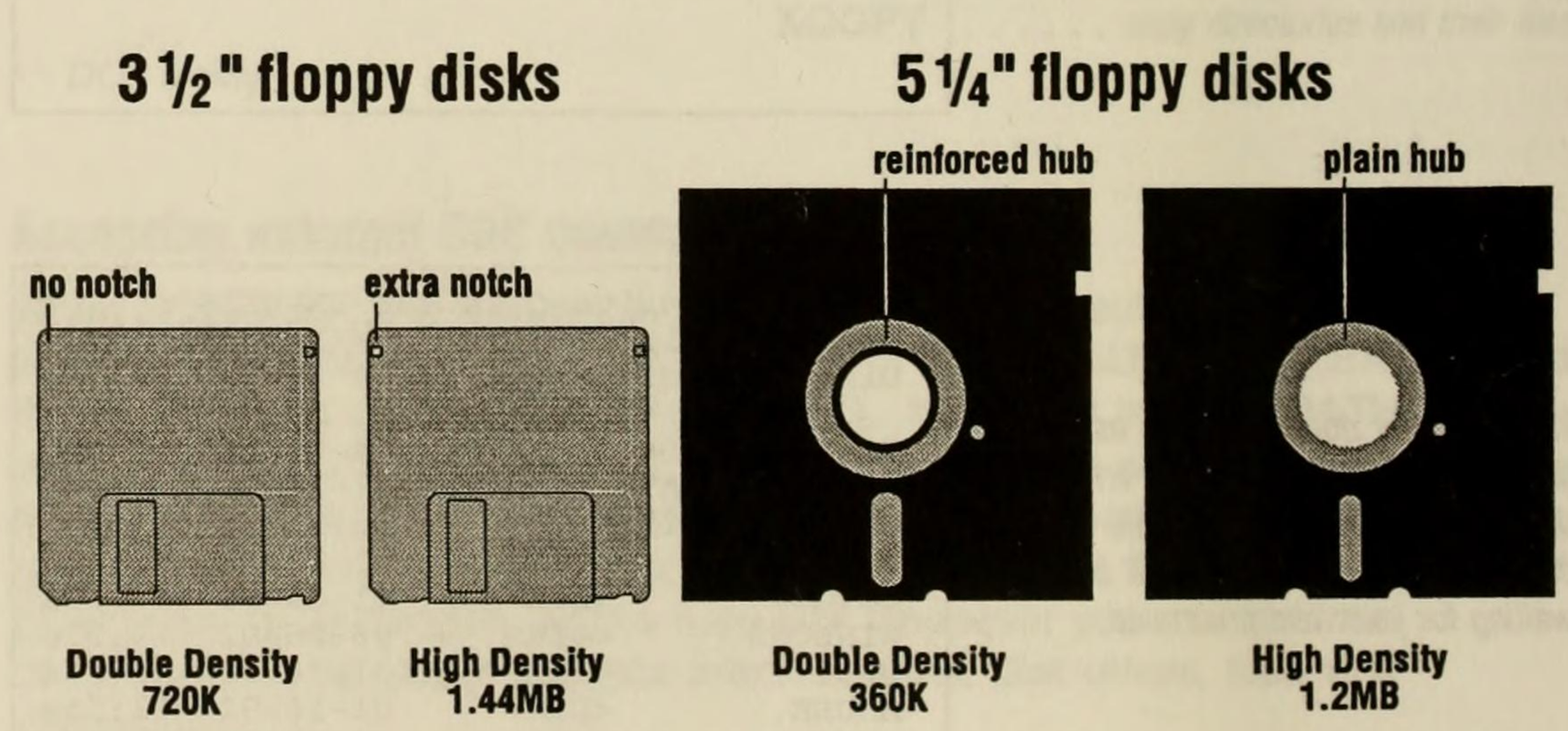
SIZE	*DENSITY*	*CAPACITY*
5¼"	*DD (double density)*	*360K (360,000 bytes)*
5¼"	*HD (high density)*	*1.2MB (1,200,000 bytes)*
3½"	*DD (double density)*	*720K (720,000 bytes)*
3½"	*HD (high density)*	*1.44MB (1,440,000 bytes)*

*NOTE: For information about **bytes, kilobytes, and megabytes**, see "Terms and Notes."*

Identify the differences in floppy disks

Most **5¼"** disks that can be formatted to **1.2MB** have a *plain hub* around the inside of the disk, while most **5¼" disks** that are meant to be formatted to **360K** have a *reinforced hub*.

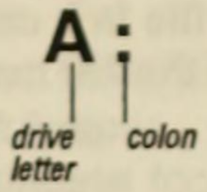
Most **3½"** disks that can be formatted to **1.44MB** have *two* "notches" while most **3½"** disks that can be formatted to **720K** have *one* "notch."



*IMPORTANT: Every floppy disk has a **write-enable notch** (right side of each disk in illustration). You can alter this notch to prevent anyone from changing data on the disk. To **write-protect** a 3½" disk, you must slide the tab so the hole is open. To write-protect a 5¼" disk, you must place a **write-protect tab** (or a piece of tape) over the cut-out notch.*

Every disk drive has its own letter

DOS assigns a letter to every disk in your system. DOS knows that you are talking about a disk drive when a command contains a *letter* followed by a *colon*:



What disk drives do you have?

There are three standard disk drive options that may be available on your system.

1. Drive A: - (a floppy disk drive—either 5¼" or 3½")
2. Drive B: - (a floppy disk drive—either 5¼" or 3½")
3. Drive C: - (a hard disk drive)

Your computer system will have at least one floppy disk drive, usually drive A:. This book *assumes* that your computer system has a hard disk drive, usually drive C:. Your system may or may not have a second floppy disk drive, usually drive B:.

The *hard disk* and its *drive* is one unit that is usually enclosed inside the computer case. Hard disk drives have a much faster access time than floppy disk drives.

Floppy disk drives have an opening so you can put a *floppy disk* into them.

What size and capacity is your floppy disk drive?

Floppy disk drives come in two different sizes (5¼" and 3½"), and each size comes in different capacity levels. These days, disk drives that use high-density disks are more common than disk drives that use only double-density disks.

Four different floppy disk drives are examined below:

Floppy Disk Drives	*5¼" Disk Drives*	*3½" Disk Drives*
Double Density	***360K disk drives** can read and format only 360K disks (not 1.2MB disks).*	***720K disk drives** can read and format only 720K disks (not 1.44MB disks).*
High Density	***1.2MB disk drives** can read both 1.2MB and 360K disks and can format disks to both 1.2MB and 360K (however, you must use a special format command to format disks to 360K).*	***1.44MB disk drives** can read both 1.44MB and 720K disks and can format disks to both 1.44MB and 720K (however, you must use a special format command to format disks to 360K).*

NOTE: You should not format double-density (DD) disks to high-density (HD) nor high-density (HD) disks to double-density (DD).

TOPIC 8
Disk drives

OBJECTIVES:

- identify how disk drives are named
- identify your disk drives
- identify the size and capacity of your floppy disk drive(s)

- Terms and Notes -

disk drives
Devices that your computer uses to transfer information back and forth between the computer's **memory** and **disks**.

hard disk drive
A built-in storage device that has a non-removable disk (a fixed disk) with a large capacity. Hard disks provide fast retrieval and storage of files.

floppy disk drive
A storage device that retrieves and stores files on removable media called floppy disks.

TOPIC 9
Files

OBJECTIVES:

- identify what files are
- identify the rules for naming files
- identify *filename extensions* that DOS uses for special jobs
- identify *filename extensions* that have developed special meanings through common usage
- identify *filename extensions* that certain programs add to filenames
- consider how you can develop filename extensions to help you *group* files
- identify where files are stored

- Terms and Notes -

file
A *collection of data* that is given a *filename* and stored on a disk.

program file
A file that holds a *set of instructions* that perform a task, such as word processing or database management.

data file
A file that consists of *data that has been created in a program*, such as a *document* typed in a *word processing program.*

filename
The name assigned to a *collection of data* that is stored on a disk.

filename extension
The *optional* "period and up to three characters" at the end of a *filename.*

ASCII file
ASCII (American Standard Code for Information Interchange) – files saved in ASCII format contain only text and are free of formatting codes (such as underlines). These "text" files often use a .TXT *filename extension.*

Files

A **file** is a *collection of data* that is given a *filename* and stored on a disk. Some of the *file managing* jobs that DOS helps you do are:

name files	retrieve files	copy files
organize files	resave files	delete files
save files	list files	rename files

Filenames

A *filename* is the name you assign to a *collection of data* that you save on a disk. DOS's rules for *filenames* are:

1. The filename can be no longer than 8 characters.
   NOTE: When you name files, use filenames that describe the file's contents.
2. You cannot use these characters: . " / \ [ ] : * | <> + = ; , ?
3. You cannot use a space.
4. You CAN add an optional *filename extension* of a period and up to three characters.

Filename extensions

Filename extensions are often used to identify groups of related files. DOS has assigned certain filename extensions to do special jobs:

.EXE	execution (for program files)
.COM	command (for DOS commands or program files)
.SYS	system (for files that work with your hardware)
.BAT	batch (for files that contain a set of DOS commands)

Some *filename extensions* have developed special meanings through common usage, for example:

.TXT	text (for ASCII text files)
.DAT	data (for data files)

Some *filename extensions* are automatically added by a program, for example:

.WK1	Lotus 1-2-3's worksheet files
.DOC	Microsoft Word's document files
.DB	Paradox's database files
.BMP	Windows' Paintbrush bitmap drawing files

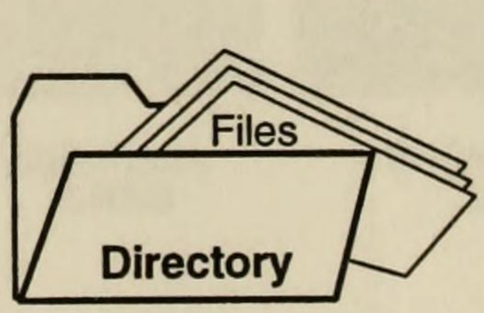
You may wish to develop your own filename extensions to help you organize your files; for example:

.LET	letter (for letters)
.RPT	report (for reports)
.MEM	memo (for memos)

NOTE: Using filename extensions in this way lets you use certain commands, such as COPY, MOVE, or DELETE, on "groups of files."

Where are files stored?

All files are stored on disks in **directories** (see next topic).



Directories

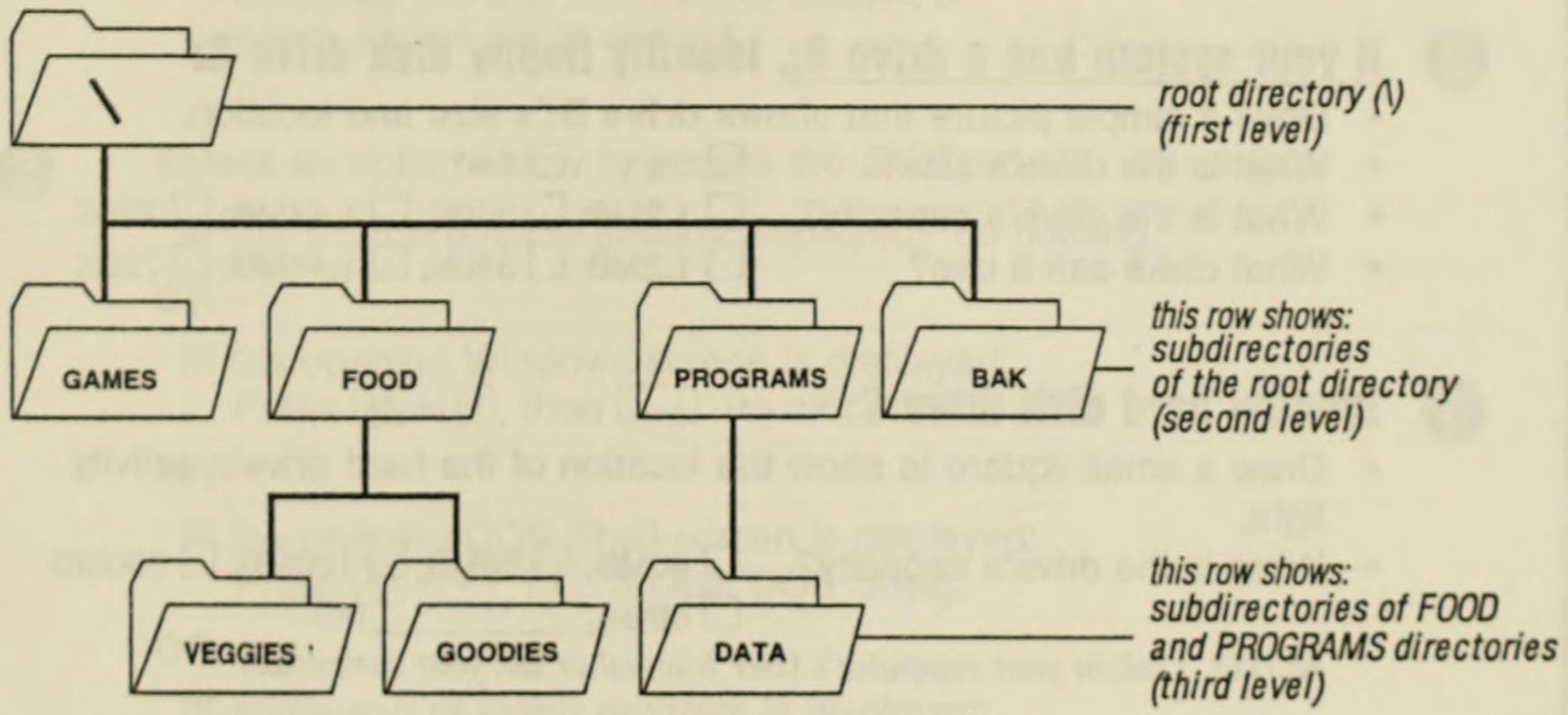
DOS lets you create directories so you can organize files on your disk. For example, you may want to save all your *game files* in a directory called GAMES and all your *recipe files* in a directory called FOOD. You may want to further organize your recipes by storing them in directories according to the *type* of food they emphasize, for example, VEGGIES and GOODIES.

Directory levels

The top directory on a disk is called the **root directory** (\). From this directory other directories (called **subdirectories**) can be created. They form the second directory level. From each second-level directory, additional *subdirectories* can be created, forming a third level of directories. While *directory* levels *can* be added until you run out of disk space, it is usually best to limit the number of directory levels. This will make it easier to specify where a file is located when you type the path to a file as shown below.

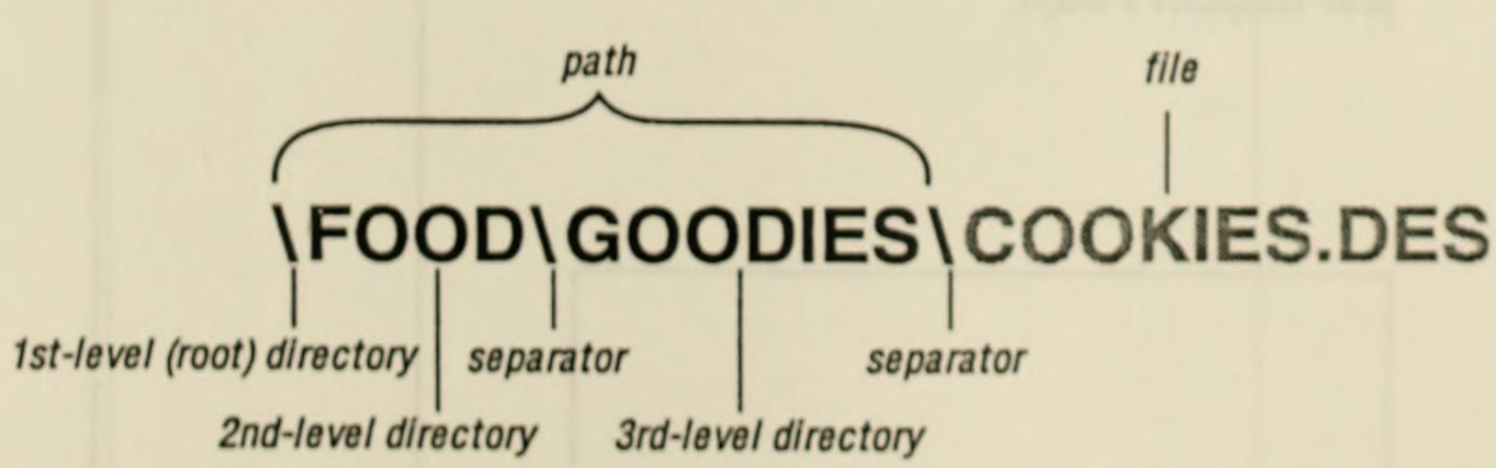
While every directory except the *root* directory is a *subdirectory* of some other directory, the term *subdirectory* is used in this book only to show the relationship between two directories.

Directory structure



Directory path (path to a file)

A file within the directory structure is found by following a **path**. The path begins with the root directory (\), and each *directory* in the **path** is separated from other directories (and the filename if it is used) by a backslash. For example, if the *file* named COOKIES.DES was in the GOODIES *directory* of the directory structure shown above, the **path** to it would look like this:



TOPIC 10
Directories

OBJECTIVES:

- identify why directories are used
- identify directory levels
- examine a directory structure
- identify the *directory path* to a file

- Terms and Notes -

directory
The part of the disk structure that holds *files* that are stored on a disk. A directory can also hold other directories (called subdirectories).

subdirectory
A directory that is within another directory.

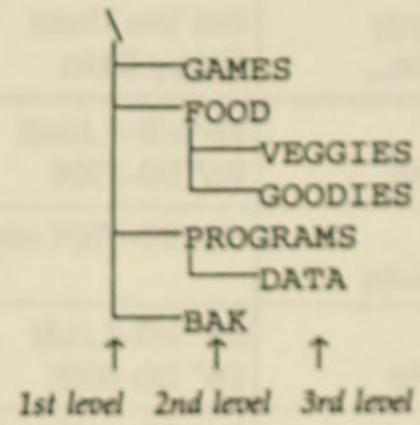
root directory
The top-level directory. Root directories are represented by a backslash (\).

current directory
The directory you are working in.

directory structure
The organization of directories on a disk. Also called a directory tree.

path
The list of directories that DOS goes through to find a directory or file.

another way to look at directory structure
DOS uses this method to list the directories on your disk when you use the TREE command (page 38).



EXERCISE 1

Disk drives

Mechanical devices that store and retrieve information on disks.

OBJECTIVES:

- identify your disk drives
- identify sizes of your disk drives
- identify capacity of your disk drives
- identify disks used by your disk drives

– Terms and Notes –

hard disk
A large-capacity storage area that is built into your computer and offers fast data storage and retrieval.

floppy disk
A small, flexible disk on which information can be stored and retrieved. Even though 3½" disks have a hard plastic case, they are still called floppy disks.

floppy disk size
Floppy disks come in two sizes: 3½" and 5¼".

disk density
The type of coating on a disk. Different densities allows more (HD) or less (DD) information to be stored on a disk.

disk capacity
The amount of data a disk can hold—it differs depending on a disk's *density*. Disk capacity is measured in bytes, kilobytes (K), and megabytes (MB). (See Topic 7)

Which floppy disks does your floppy disk drive use?

This Floppy Disk Drive...	Can Use These Floppy Disks
3½" HD (high density)	3½" HD–1.44MB 3½" DD–720K
3½" DD (double density)	3½" DD–720K only
5¼" HD (high density)	5¼" HD–1.2MB 5¼" DD–360K
5¼" DD (double density)	5¼" DD–360K only

NOTE: The DS notation on disks indicates that they are double sided. Almost all floppy disks sold today are double sided.

What disks does your floppy disk drive use?

Floppy disk drives come in two sizes—3½" and 5¼", and each size comes in two densities—**HD** (high density) and **DD** (double density).

HD disk drives can use both *HD* and *DD disks*, while **DD disk drives** can use only *DD disks*. Most **floppy disk drives** sold today are **HD**, but you *may* have a **floppy disk drive** that is **DD**.

You cannot tell by looking at a **floppy disk drive** what *density* it is. You can find this information in your computer's reference manual or you can simply try a DIR command (page 30) on an *HD disk* in your **floppy disk drive** to see if it can read the disk. If it can, it is an **HD disk drive**.

Draw the **disk drive** in each step below on the computer illustration at the bottom of the page that matches your computer's shape.

❶ Identify floppy disk drive A:

- Draw a simple picture that shows **drive A:**'s size and location.
- What is the drive's size? ☐ 3½"; ☐ 5¼"
- What is the drive's capacity? ☐ 1.2MB; ☐ 360K; ☐ 1.44MB; ☐ 720K
- What disks can it use? ☐ 1.2MB; ☐ 360K; ☐ 1.44MB; ☐ 720K

❷ If your system has a drive B:, identify floppy disk drive B:

- Draw a simple picture that shows **drive B:**'s size and location.
- What is the drive's size? ☐ 3½"; ☐ 5¼"
- What is the drive's capacity? ☐ 1.2MB; ☐ 360K; ☐ 1.44MB; ☐ 720K
- What disks can it use? ☐ 1.2MB; ☐ 360K; ☐ 1.44MB; ☐ 720K

❸ Identify hard disk drive C:

- Draw a small square to show the location of the hard drive's activity light.
- What is the drive's capacity? ☐ 40MB; ☐ 80MB; ☐ 100MB; ☐ 200MB ☐ other _____MB

NOTE: Look in your computer's User Manual or ask your instructor.

❹ Identify other drives your computer may have.

- ☐ CD-ROM drive
- ☐ Bernoulli drive
- ☐ other _____

Draw and label your disk drives on the computer that matches your computer's shape.

Desktop Computer

Tower Computer

Be cautious with the hard disk

Because the **hard disk** holds large amounts of information, people sometimes become protective of it. They fear that their information might be inadvertently deleted or somehow lost. In order to avoid unnecessary contact with the **hard disk**, most of the exercises in this book instruct you to work with the **Learning Disk** in **drive A:**

However, most computer systems have DOS loaded on the **hard disk**, and certain DOS commands must be accessed from the **hard disk**. This book assumes that you have a **hard disk** with DOS on it. You will access the **hard disk** and work on it sometimes. When you do, please follow directions carefully to avoid problems.

EXERCISE 2

Access the DOS prompt

To turn on the computer and display the *DOS prompt* on the hard disk. It usually appears as: C> or C:\>.

OBJECTIVES:

- turn the computer on
- discover how to access the DOS prompt on the hard disk

- Terms and Notes -

NOTE: The instructions in this book suggest some ways you might access the DOS prompt on the hard disk. Accessing the hard disk may require steps other than those shown here. If you are a student, your instructor should be able to show you what to do. If you are a private user, refer to your user's manual or get help from a computer expert.

DOS prompt
The signal that DOS uses to let you know that it is ready for you to tell it what to do.

❶ **IMPORTANT: There should not be a disk in drive A:**

- **Turn on** the computer system.
  NOTE: If this is not obvious, ask your teacher or refer to your user's manual.

Result
Different computer systems may display different results:
- *The DOS prompt may be displayed:* ***C>*** *or* ***C:\>****, or*
- *the opening Windows screen may be displayed, or*
- *the opening DOS Shell screen may be displayed, or*
- *a menu program may be displayed.*

❷ • **Select** an option below to access the *DOS prompt*: **C>** or **C:\>**

IF the *DOS prompt* is already displayed: do nothing.

OR

IF the opening Windows screen is displayed:
Press Alt + F4, then ↵ (to exit Windows).

OR

IF the opening DOS Shell screen is displayed:
Press Alt + F, X (to exit DOS Shell).

OR

IF some sort of menu program is displayed:
You must discover how to exit the menu program—you may need to know a password.

NOTE: Since there are many different possibilities, this book cannot specify what may happen on your computer system.

Result

```
C:\>
```

❸ • **Go on** to Exercise 3.

EXERCISE 3

Change drives

Makes a different disk drive active. *Changing drives* is also referred to as "logging on" to a drive.

OBJECTIVES:

- change disk drives
- see what happens when you enter the name of a nonexistent disk drive
- see what happens when you change to a disk drive with no disk in it
- use two ways to recover from a "not reading drive" error

– Terms and Notes –

active drive
The drive you are currently using.

active DOS prompt
The last DOS prompt on your screen. DOS leaves the commands you have entered on the screen so that you can see the results of previous commands.

NOTE: DOS does not care whether you use uppercase or lowercase letters when typing commands. This book uses uppercase only for clarity and consistency.

STEPS to

Change drives

1 Type the drive letter.
2 Type :
3 Press ↵

Continue from Exercise 2

About the Learning Disk

This is the first time you will use the Learning Disk that came with this book. Before you use the Learning Disk, it is a good idea to use DISKCOPY to make a **backup** copy of the Learning Disk (see Exercise 18) however you can continue without making a backup. The original Learning Disk should remain unchanged since it will be "diskcopied" to a "DUPLICATE" Learning Disk at several stages throughout this book.

You can further protect the Learning Disk by "write-protecting" it (see Topic 7 and Exercise 18, step 1).

1 • **Place** the **Learning Disk** that came with this book in drive A:.

*NOTE: If the Learning Disk does not match the **size** of your disk drive A: or if your disk drive is not **high density (HD)**, see page iv for information about obtaining a Learning Disk you can use in drive A: on your computer system. Page iv also contains information about how you can possibly use the Learning Disk in drive B: until you receive your new Learning Disk or how you can possibly create a new Learning Disk.*

2 Change to drive A:

- **Type** `A:` ↵

The light in drive A: comes on, and the DOS prompt for drive A: appears on the screen indicating that drive A: is now active.

```
C:\>A:

A:\>    ← active DOS prompt
```

*NOTE: Your **DOS prompt** may appear slightly different. Exercise 5 will show you how to change the **DOS prompt**.*

3 Change back to drive C:

- **Type** `C:` ↵

```
C:\>A:

A:\>C:

C:\>  ← active DOS prompt
```

Exercise 3 continued...

4 • **Repeat** steps **2** and **3** four times, ending on step **2** (drive A:).

5 Intentionally change to a nonexistent disk drive:

• **Type** `Q:` ↵

The following error message appears:

```
Invalid drive specification
```

6 • **Change** to drive C: (see step 3).

```
C:\>
```

7 Intentionally change to a drive without a disk in it:

• **Take** the disk out of drive A:.

• **Type** `A:` ↵

The following error message appears, and options to choose from appear below the message:

```
Not ready reading drive A
Abort, Retry, Fail?
```

NOTE: When you enter a command to change to a drive, DOS does not just respond with the prompt for drive A:, DOS tries to "read" the information on the disk before displaying a DOS prompt.

One Solution:

• **Type** `F` to try the "Fail" option.

DOS displays the following message:

```
Current drive is no longer valid>
```

• **Type** `C:` ↵ to tell the computer to go to drive C: (which is a valid drive).

```
C:\>
```

8 Try a different solution to step 7:

With the disk still out of drive A:

• **Type** `A:` ↵

The following error message appears:

```
Not ready reading drive A
Abort, Retry, Fail?
```

• **Put** the disk back in drive A:, and close the door if necessary.

• **Type** `R` to tell the computer to "retry" the original command.

```
A:\>
```

9 • **Go on** to Exercise 4.

IMPORTANT: As you continue through the book, some screen "result boxes" may omit the final prompt (A:\>) or some beginning lines.

STEPS to

Respond to "Abort, Retry, Fail?" message

- Correct the problem (i.e., put the disk in the drive or put the disk in the drive in the correct way).
- Press the first letter of the option you want to select.

If you selected Fail,

- Type another drive letter followed by a colon and ↵

EXERCISE 4

CLS (clear screen)

Removes all the information from the screen and displays a new *DOS prompt* at the top of the screen.

OBJECTIVES:

- use the CLS command to clear the screen
- correct errors in a command before pressing Enter
- identify the meaning of "bad command or file name" error message
- have DOS automatically retype your last command

- Terms and Notes -

error message
A message that DOS displays on your screen when it does not recognize what you have entered.

STEPS to

Clear the screen
- **Type** CLS ↵

Enter a command
1 **Type** the command name.
2 **Press** ↵

Make corrections
- **Press** BkSp until the unwanted characters are removed.

Repeat the last command
- **Press** F3

Continue from Exercise 3

Clear the screen

A lot of data is on the screen. CLS is the command that lets you clear the screen and return a DOS prompt to the top of the screen.

NOTE: While most exercises in this book ask you to perform activities that relate only to the command or task in the exercise name, this exercise asks you to do some activities that are unrelated to the CLS command.

1 Clear the screen:
- **Type** CLS ↵

```
A:\>
```

2 Correct mistakes before pressing enter:
- **Type** CLA
- **Press** BkSp to delete the "A".
- **Type** S
- **Press** ↵

```
A:\>
```

3 Intentionally enter a bad command:
- **Type** what time is it ↵

```
Bad command or file name
```

*NOTE: "Bad command or file name" is a common **error message** that DOS displays when either:*
- *what you typed is not a DOS command (it is a "bad" command) or*
- *DOS was unable to find a filename that matches what you typed (it is a "bad" filename).*

- **Type** show me files ↵

```
Bad command or file name
```

4 Repeat the last command:
- **Press** F3 ↵

```
Bad command or file name
```

5
- **Type** CLS ↵

```
A:\>
```

6
- **Change** to Drive C: (review, Exercise 3).

```
C:\>
```

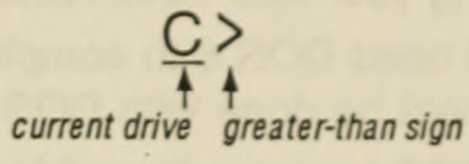
7
- **Go on** to Exercise 5
  or **take** the disk out of drive A: and turn the computer system off.

What the DOS prompt tells you

The **DOS prompt** (also called the system prompt) is the signal that the computer is waiting for you to tell it what to do (see page 9).

The default DOS prompt

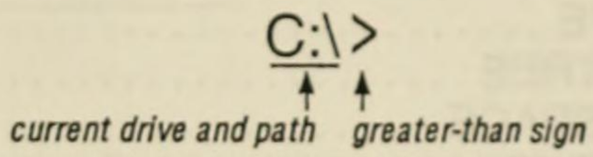
The **default** DOS prompt displays the *drive letter* and the *greater-than sign*, for example:



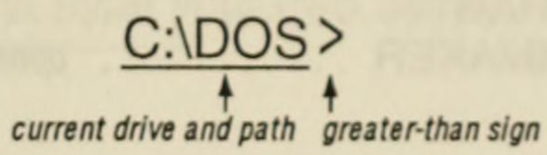
The most common DOS prompt

Many computer systems go through an automatic procedure to change the DOS prompt when you turn the computer on. The DOS prompt is *usually* changed so that it will show the path to the current directory (the current drive and path) followed by the *greater-than sign*.

- If you are in the root directory, the prompt looks like this:



- If you are in a directory named DOS, the prompt looks like this:



❶ • **Access** the Learning Disk (review, Exercises 2 and 3).

❷ • **Type** PROMPT ↵

```
A>
```

*NOTE: The PROMPT command, by itself, results in the **default** prompt, that is, the "current drive letter" followed by the "greater-than" sign.*

❸ • **Type** PROMPT Hi There ↵

```
Hi There
```

❹ • **Type** PROMPT Today is $D ↵

```
Today is Thur 04-15-93
```

❺ • **Type** PROMPT The Time Is T_PG ↵

```
The Time Is 15:47:36.11
A:\>
```

❻ • **Type** PROMPT PG ↵

```
A:\>
```

IMPORTANT: This DOS PROMPT is the one that this book will instruct you to use.

❼ • **Take** the disk out of drive A: and turn the computer system off.

EXERCISE 5
PROMPT

Changes the appearance of the DOS prompt.

OBJECTIVES:

- identify and create the default DOS prompt
- identify and create the most commonly used DOS prompt
- create a DOS prompt that uses special PROMPT codes and/or text

- Terms and Notes -

default prompt
The prompt that is created when you type only the PROMPT command and press Enter.

common prompt
The DOS prompt that is created when you type PROMPT PG and press Enter. The *common prompt* displays the "path to the current directory" followed by the "greater-than sign," for example, C:\>.

current drive
The drive you are using, also called the *active* drive.

path
The route to a specific location in DOS's system of directories.

Commonly used PROMPT codes

Code	Displays
$P	current drive and path
$G	> (greater-than sign)
$T	time
$D	date
$L	< (less-than sign)
$Q	= (equal sign)
$B	| (pipe sign)
$_	carriage return

STEPS to

Change the DOS Prompt

1 Type PROMPT
2 Press Space
3 Type text and/or prompt codes (see above).
4 Press ↵

EXERCISE 6

VER (version)

Displays DOS's name and version number.

OBJECTIVE:

- determine the version of DOS that you are using

– Terms and Notes –

version
The numbering plan that identifies software revisions and upgrades. Version numbers have two parts: a whole number and a decimal.

version numbers
Version numbers have two parts:

6.00
↑ ↑
whole number part decimal part

minor version changes
When a software company makes *minor* changes (revisions) to a program, they change the *decimal* part of the version number.
For example:
if the old version was 5.1,
the new version would be 5.2.

major version changes
When a software company makes *major* changes (upgrades) to a program, they change the *whole number* part of the version number.
For example:
if the old version was 5.1,
the new version would be 6.0.

What version of DOS are you using?

Most of the exercises in this book can be done with any version of DOS. The newer versions of DOS have added some new commands such as MOVE and DELTREE (DOS 6). However, most of the basic commands and rules for managing your files have remained constant with each version of DOS.

You will need DOS 6 to complete all of the exercises in this book. Exercises that cannot be done with DOS 5 will be pointed out.

Some DOS commands and features that are new in DOS 5:

UNDELETE ..... *restore deleted files*
UNFORMAT ..... *restore a reformatted disk*
XCOPY ..... *copy a directory, its subdirectories, and their files*
MEM ..... *shows memory used and memory still available*
DOSSHELL ..... *start the DOS Shell file management program*

Some DOS commands and features that are new in DOS 6:

MOVE ..... *move a file or rename a directory*
DELTREE ..... *delete a directory and everything within the directory*
DBLSPACE ..... *compress files*
DEFRAG ..... *reorganize files*
MEMMAKER ..... *optimizes memory use for PC's with 80386 processors or higher*

❶ • **Turn on** the computer system, and
• **Access** the **DOS prompt** on the hard disk (review, Exercises 2 and 3).

❷ • **Type** VER ↵

```
MS-DOS Version 6.00
```

NOTE: You may have DOS 5.00 or an earlier DOS version.

❸ • **Turn** the computer off.

STEPS to

Determine the DOS version
1 Type VER
2 Press ↵

EXERCISE 7
Practice

LESSON ONE
Getting Started

OBJECTIVE:

- review the Exercises in Lesson One:

  Start the computer
  (and access the DOS prompt)
  Change drives
  PROMPT
  VER (version)
  CLS (clear screen)
  Enter bad commands
  Change to a nonexistent drive

The commands to perform each step are listed in Appendix I. Try to complete the exercise without looking at the Appendix for help.

❶ **Start** the computer and **access** the DOS prompt on drive C:.

```
C:\>
```

❷ **Place** the Learning Disk in drive A:.

❸ **Change** to drive A:.

```
A:\>
```

❹ **Change** the DOS prompt to the *default* DOS prompt.

```
A>
```

❺ **Change** the DOS prompt to your name (type your own name).

```
(Your Name)
```

❻ **Change** the DOS prompt to display the date after the following text:
`Today's date is`

```
Today's date is (Day mm-dd-yy)
```

❼ **Create** a two-line DOS prompt of your choice.

❽ **Change** to the common DOS prompt that displays the "*current drive and path*" and the "*greater-than sign.*" *HINT: See Exercise 5, step 6.*

```
A:\>
```

❾ **Display** the version of DOS you are using.

```
MS-DOS Version 6.00
```

NOTE: You may have a different version.

❿ **Clear** the screen.

The DOS prompt appears at the top of the screen.

```
A:\>
```

⓫ **Type** `what time is it?` ↵ (a "bad command")

```
Bad command or file name
```

⓬ **Change** the DOS prompt to display the time after the following text:
`Time:`

```
Time: (hh:mm:ss.xx)
```

⓭ **Change** back to the common DOS prompt that displays the "current drive and path" and the "greater-than sign" again.

```
A:\>
```

Exercise 7 continued...

14. **Clear** the screen.

```
A:\>
```

15. **Change** to drive C:.

```
C:\>
```

16. **Change** back to drive A:.

```
A:\>
```

17. **Change** to a nonexistent drive—drive J:

```
Invalid drive specification
```

18. **Change** to drive C: again.

```
C:\>
```

19. **Remove** the disk from drive A:.

20. **Change** to drive A:.

```
Not ready reading drive A
Abort, Retry, Fail?
```

21. **Put** the Learning Disk back in drive A: and close the door (if necessary).

22. **Type** R (to retry).

```
A:\>
```

23. **Remove** the disk from drive A:.

24. **Change** to drive A:.

```
Not ready reading drive A
Abort, Retry, Fail?
```

25. **Type** F (to select Fail).

```
Current drive is no longer valid>
```

26. **Type** C: ↵

```
C:\>
```

27. **Go on** to Worksheet 1.
If desired, **take** the disk out of drive A: and turn the computer off.

WORKSHEET 1

NAME _____

TOPICS 1 and 2

DIRECTIONS: Use the following terms to fill in the blanks below.

printer	keyboard	disk drive	system software
monitor	software	floppy disk	read-only memory (ROM)
hardware	firmware	memory (RAM)	DOS (Disk Operating System)
computer	hard disk	processor (CPU)	application software (program)
mouse			

1. A screen that displays the information in the computer. 1. _____

2. A device that is used to enter data into and issue commands to the computer. 2. _____

3. Instructions that tell your computer how to perform a task. It is stored on disks in program files and cannot be seen or touched. 3. _____

4. A device that makes a hard copy of data in the computer. 4. _____

5. A mechanical device that you use to transfer information back and forth between memory and a disk. 5. _____

6. A kind of chip that holds information that cannot be changed. 6. _____

7. A large-capacity storage area that offers fast access to store and retrieve information. 7. _____

8. A magnetically coated disk on which information can be stored and retrieved. 8. _____

9. Software that runs the computer. 9. _____

10. Software that does a specific task, such as word processing. 10. _____

11. A kind of *system software*—instructions that are built into the computer system on ROM chips. 11. _____

12. The group of parts that make up the computer system. It can be seen and touched. 12. _____

13. A special kind of *system software* that is stored on the hard disk. It acts as a link between *application software* and the computer's hardware. 13. _____

14. The part of the computer that processes the instructions that are in memory. 14. _____

15. An electronic device that performs complex tasks at high speed and with great accuracy. There are two main parts—*processor* and *memory*. 15. _____

16. The area of the computer that holds instructions (programs) and information you give it. When you turn the computer off, everything in it disappears. 16. _____

17. A small hand-held device you use to control a pointer on the screen. 17. _____

(This page may be copied.)

WORKSHEET 2

NAME _____

TOPICS 3, 4, 5, 6, and 7

DIRECTIONS: Use the following terms to fill in the blanks below.

DOS	program	DOS command	external DOS commands
disks	hardware	disk density	disk and directory structure
bytes	you (user)	disk capacity	
booting	DOS prompt	internal DOS commands	

1. DOS commands that are stored in a file called COMMAND.COM and are automatically loaded into the computer's memory. Because they reside in memory, you can execute *them* at any time. 1. _____

2. The signal that the computer is waiting for you to tell it what to do. 2. _____

3. Media on which information is stored and retrieved. 3. _____

4. DOS commands that are stored in a file and that are accessible only if they can be reached on the disk and directory in which they are stored. 4. _____

5. The controller of the computer system (its software and hardware). 5. _____

6. A set of instructions (software) that your computer carries out to perform a specific task, such as *word processing*. 6. _____

7. *This* refers to the surface coating on a disk. The closer together the particles on the disk are, the higher the disk's capacity. 7. _____

8. System software that links you and programs to the computer's hardware. 8. _____

9. *This* is a unit of measurement. It is the amount of space needed to hold one character. The size of many computer parts are measured in *this*. 9. _____

10. The physical parts of your computer system—processor, memory, disks, disk drives, keyboard, and monitor, etc. 10. _____

11. The number of *bytes* a disk can hold. 11. _____

12. Instructions to DOS that cause an action to be carried out. 12. _____

13. A file storage system that provides for the creation of directories for the organization of files on disks. 13. _____

14. To begin the computer's start-up process, and load DOS into the computer's memory. 14. _____

(This page may be copied.)

WORKSHEET 3

NAME _____

TOPICS 8, 9, and 10

DIRECTIONS: Use the following terms to fill in the blanks below.

path	data file	subdirectory	filename extension
file	ASCII file	root directory	current directory
filename	disk drives	hard disk drive	directory structure
directory	program file	floppy disk drive	

1. The *optional* "period and up to three characters" at the end of a *filename*. 1. _____

2. The part of the disk structure that holds *files* that are saved on a disk. 2. _____

3. Files saved in *this* format contain only text and are free of any formatting codes (such as underlines). These "text" files often use a .TXT *filename extension*. 3. _____

4. The list of directories that DOS goes through to find a directory or file. 4. _____

5. A built-in storage device that has a non-removable disk (a fixed disk) with a large capacity that provides fast retrieval and storage of files. 5. _____

6. Devices that your computer uses to transfer information back and forth between the computer's memory and disks. 6. _____

7. A storage device that retrieves and stores files on removable media called floppy disks. 7. _____

8. A directory that is within another directory. 8. _____

9. A *collection of data* that is given a *filename* and stored on a disk. 9. _____

10. The top-level directory. It is represented as a backslash (\). 10. _____

11. The organization of directories on a disk. 11. _____

12. The directory you are working in. 12. _____

13. A file that holds a *set of instructions* that perform a task, such as word processing or database management. 13. _____

14. The name you assign to a *collection of data* that you save on a disk. 14. _____

15. A file that consists of *data that has been created in a program*, such as a *document* typed into a *word processing program*. 15. _____

(This page may be copied.)

WORKSHEET 4

NAME _____

EXERCISES 1, 2, and 3

DIRECTIONS: Use the following terms to fill in the blanks below.

hard disk	active drive	write-protect	Access the DOS prompt
Disk drives	disk density	floppy disk size	
DOS prompt	disk capacity	write-protect tab	
floppy disk	Change drives	active DOS prompt	

1. *This* refers to the amount of data a disk can hold—which is different depending on a disk's *density*. It is measured in bytes, kilobytes (K), and megabytes (MB). 1. _____

2. To turn on the computer and display the *DOS prompt* on the hard disk. 2. _____

3. A small, flexible disk on which information can be stored and retrieved. It describes a 3½" disk even though the 3½" disk has a *hard* plastic case. 3. _____

4. The signal that DOS uses to let you know that it is ready for you to tell it what to do. 4. _____

5. 3½ inches and 5¼ inches. 5. _____

6. The drive you are currently using. 6. _____

7. *This* refers to the type of coating on a disk. It allows more (HD) or less (DD) information to be stored on a disk. 7. _____

8. To make a different disk drive active. It is also referred to as "logging on" to a drive. 8. _____

9. A large-capacity storage area that is built in to your computer and offers fast storage and retrieval. 9. _____

10. The last DOS prompt on your screen. 10. _____

11. Mechanical devices that store and retrieve information on disks. 11. _____

12. A small self-adhesive tab that often comes packaged with disk labels and is used to cover the write-enable notch on a 5¼" floppy disk. 12. _____

13. To use a procedure that will protect a disk from being changed in any way while still allowing you to read the information on the disk. 13. _____

(This page may be copied.)

WORKSHEET 5

NAME _____

EXERCISES 4, 5, and 6

DIRECTIONS: Use the following terms to fill in the blanks below.

path	current drive	VER (version)	minor version changes
version	error message	CLS (clear screen)	the most common prompt
PROMPT	default prompt	major version changes	

1. The DOS command that displays DOS's name and version number. 1. _____

2. The kind of change that a software company makes to a program when it changes the *decimal* part of the version number. 2. _____

3. The numbering plan that identifies software revisions and upgrades. It has two parts: a whole number part and a decimal part. 3. _____

4. The kind of change that a software company makes to a program when it changes the *whole number* part of the version number. 4. _____

5. The DOS command that removes all information from the screen and displays a new *DOS prompt* at the top left corner of the screen. 5. _____

6. What DOS displays on your screen when it does not recognize what you have entered. 6. _____

7. The drive you are using, also called the *active* drive. 7. _____

8. The route to a specific location in DOS's system of directories. 8. _____

9. The command that changes the appearance of the DOS prompt. 9. _____

10. The prompt that is created when you type only the PROMPT command and press Enter. For example, C>. 10. _____

11. The prompt that is created when you issue this PROMPT command: PROMPT PG. For example, C:\>. 11. _____

(This page may be copied.)

WORKSHEET 6

NAME _____

LESSON ONE, Questions and Commands

1. What size is your disk drive A:?

   1. _____
   (answers will vary)

2. What size is your disk drive B:? *(leave blank if you do not have a drive B:)*

   2. _____
   (answers will vary)

3. Do your floppy disk drives accept *high density* (HD) disks?

   3. _____
   (answers will vary)

4. How do you access the DOS prompt on drive C:?

   4. _____
   (answers will vary)

5. What PROMPT *code* displays the greater-than sign (>)?

   5. _____

6. What PROMPT *code* displays the *current drive and path*?

   6. _____

7. What PROMPT *code* displays the date?

   7. _____

8. What PROMPT *code* displays the time?

   8. _____

9. What PROMPT *code* creates a *carriage return* in the prompt line?

   9. _____

10. How do you guard against changing a disk in any way while still allowing information on the disk to be read?

    10. _____

11. How do you *write-protect* a 3½" disk?

    11. _____

12. How do you *write-protect* a 5¼" disk?

    12. _____

WHAT IS THE DOS COMMAND TO:

13. Change from drive C: to drive A:

    13. _____

14. Change the prompt to this: HELLO

    14. _____

15. Change the prompt to this: TODAY IS mm-dd-yy
    (where mm-dd-yy represents the date)

    15. _____

16. Change to the default DOS prompt: C>

    16. _____

17. Change to the most common DOS prompt: C:\>

    17. _____

18. Clear the screen

    18. _____

19. Display the version of DOS you are using

    19. _____

20. Change from drive A: to drive C:

    20. _____

NOTE: You do not need to write Enter at the end of each command.

(This page may be copied.)

Lesson Two
Exploring Directories

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EXERCISE 8

DIR (directory)

Displays a list of files and/or directories within a directory, plus:

- **the *size* of each file in bytes,**
- **the *date* each file was created (or last changed),**
- **the *time* each file was created (or last changed),**
- **the *number* of files and directories on the disk,**
- **the bytes *used*, and**
- **the bytes *still available* on the disk.**

OBJECTIVES:

- use DIR to list the files and directories on your disk
- name the different parts of the directory list
- scroll the directory list
- use DIR to list the files on a disk drive other than the *current* one

– Terms and Notes –

directory
The part of the disk structure that holds *files* and/or other *directories*.

scrolling
The vertical movement of files on the screen.

STEPS to

List files
- **Type** DIR ↵

Scroll the DIR list
1 **Type** DIR ↵
2 **Press** Ctrl + S
The scrolling stops.
3 **Press** any key.
The scrolling continues.

List files on a different drive
1 **Type** DIR
2 **Press** Space
3 **Type** the desired drive location.
4 **Press** ↵

❶ Set up for the exercise (review Lesson One):

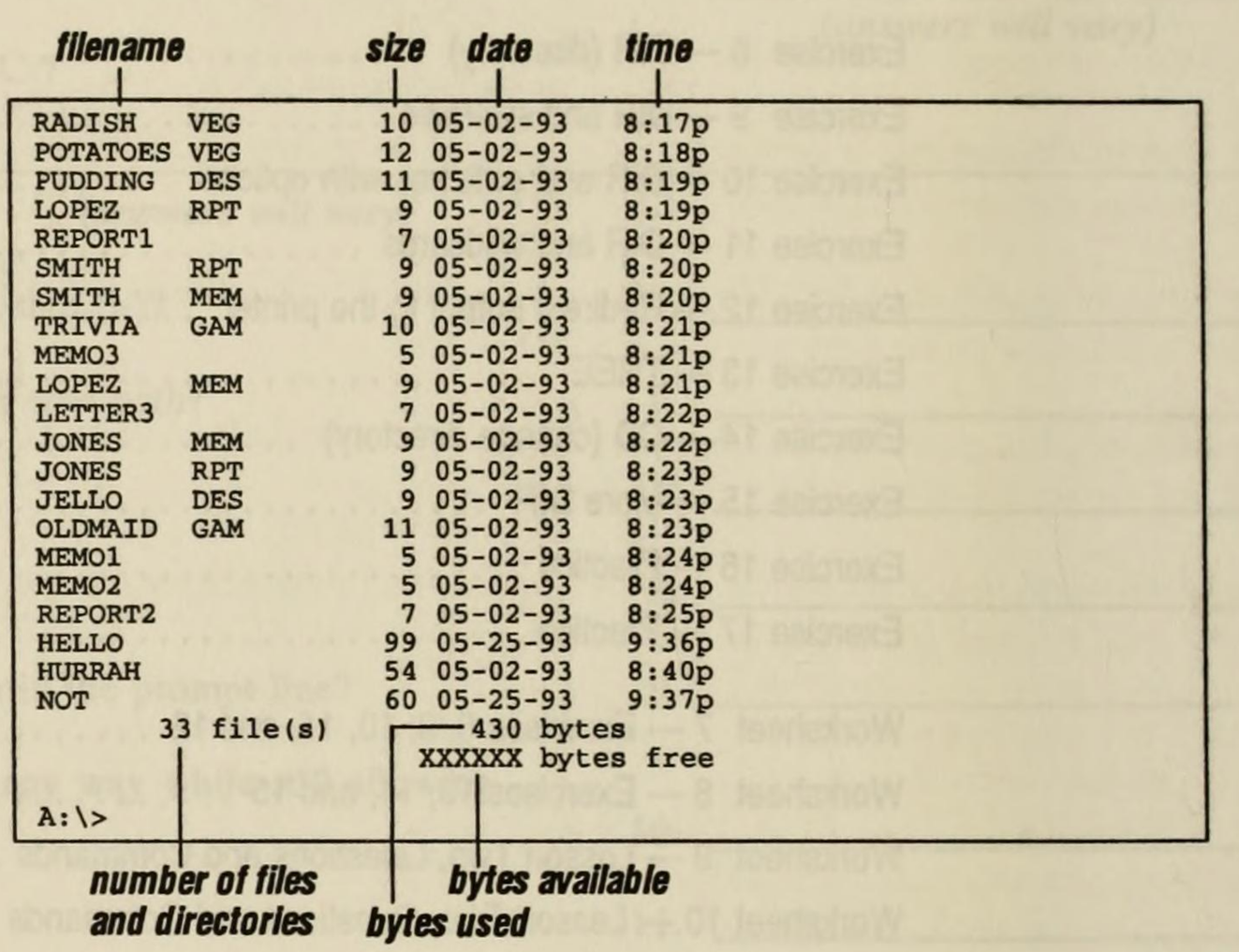
- **Start** the computer and **access** the DOS prompt on drive C:.
- **Place** the Learning Disk in drive A: and **change** to drive A:.
- **Change** to this common DOS prompt, if necessary: A:\>

NOTE: Most exercises will ask you to use a similar "setup" procedure "if necessary"—if you are continuing it will not be necessary (see Exercise 9).

❷ List files on the current drive and directory:

- **Type** DIR ↵

Filenames flash by on the screen, some scrolling out of view.



❸ Stop the DIR scrolling:

- **Locate** the Ctrl and S keys, and **be ready** to hold down Ctrl and tap S *quickly* after you issue the DIR command.
- **Type** DIR ↵
- **Press** Ctrl + S

The scrolling stops.

*NOTE: If you have a very fast computer **you may not be able to stop the scrolling** before the computer reaches the end of the list of files on the Learning Disk. This procedure is easier to do and the result of stopping and starting the scrolling is much easier if you have a long list of files, for example, over one hundred.*

- **Press** any key.

The scrolling starts again.

NOTE: If you want to continue to turn scrolling off and on, you can just hold down the Ctrl key while tapping S to alternate between scrolling and pausing.

❹ List the files on a different disk drive:

- **Type** DIR C: ↵

*DOS lists the files on **drive C:** (the hard disk) and returns you to the DOS prompt on drive A: (the **current** drive).*

❺

- **Go on** to Exercise 9
or **take** the disk out of drive A: and turn the computer off.

DIR and switches and spaces

A *switch* is an optional part of some DOS commands. When you type a command with a switch you *must* use a *slash* (*/*) to signal DOS that a switch is coming. You may also put a space before the switch, but DOS can understand the command without the space (see Topic 11, page 80). When a command contains just the command name and a switch you are less likely to see people use a space before the switch. When a command is more complex, you are more likely to see people use a space before the switch. For example:

simple command:	`DIR/P`	← no space precedes the switch
complex command:	`DIR C:\DOS /P`	← a space precedes the switch

This is not a rule. DOS can understand *both* commands *with* or *without* the space (either way is correct).

1 • If necessary, **access** the Learning Disk on drive A: and **change** to this common DOS prompt: `A:\>`

2 **Pause the DIR at the end of each screenful:**

• **Type** `DIR/P` ↵

The first screenful of files is displayed.

```
 Volume in drive A is LEARNING          ← disk volume
 Volume Serial Number is XXXX-XXXX
 Directory of A:\                       ← current directory

GAMES          <DIR>      05-02-93   7:46p
FOOD           <DIR>      05-02-93   7:46p
PROGRAMS       <DIR>      05-22-93   8:41p
JONES     LET              9 05-02-93   7:48p
BAK            <DIR>      05-22-93   8:43p
SMITH     LET              9 05-02-93   8:13p
LOPEZ     LET              9 05-02-93   8:13p
LETTER1                    7 05-02-93   8:15p
REPORT3                    7 05-02-93   8:16p
LETTER2                    7 05-02-93   8:16p
CLUE      GAM              8 05-02-93   8:17p
CORN      VEG              8 05-02-93   8:17p
RADISH    VEG             10 05-02-93   8:17p
POTATOES  VEG             12 05-02-93   8:18p
PUDDING   DES             11 05-02-93   8:19p
LOPEZ     RPT              9 05-02-93   8:19p
REPORT1                    7 05-02-93   8:20p
SMITH     RPT              9 05-02-93   8:20p
SMITH     MEM              9 05-02-93   8:20p
Press any key to continue . . .
```

• **Press** any key.

The second (and final) screenful of files is displayed, and the DOS prompt appears at the bottom.

```
LOPEZ     RPT              9 05-02-93   8:19p
REPORT1                    7 05-02-93   8:20p
SMITH     RPT              9 05-02-93   8:20p
SMITH     MEM              9 05-02-93   8:20p
Press any key to continue . . .

(continuing A:\)
TRIVIA    GAM             10 05-02-93   8:21p
MEMO3                      5 05-02-93   8:21p
LOPEZ     MEM              9 05-02-93   8:21p
LETTER3                    7 05-02-93   8:22p
JONES     MEM              9 05-02-93   8:22p
JONES     RPT              9 05-02-93   8:23p
JELLO     DES              9 05-02-93   8:23p
OLDMAID   GAM             11 05-02-93   8:23p
MEMO1                      5 05-02-93   8:24p
MEMO2                      5 05-02-93   8:24p
REPORT2                    7 05-02-93   8:25p
HELLO                     99 05-25-93   9:36p
HURRAH                    54 05-02-93   8:40p
NOT                       60 05-25-93   9:37p
       33 file(s)          430 bytes
                        XXXXXX bytes free

A:\>
```

Continue Exercise 9 on the next page

EXERCISE 9

DIR and switches

To change the way DOS *normally* displays the contents of a directory by adding a *switch* to the end of the DIR command.

OBJECTIVES:

- define *switch*
- use switches to:
  - pause the directory output after each screenful
  - list your files in a wide format
  - list your files in alphabetical order
  - list your files in lowercase
  - list just your filenames
- use more than one switch at a time

– Terms and Notes –

switch
An optional code at the end of a command that directs the command to vary in a specific way.

A switch:
- comes at the end of a command,
- begins with a slash (*/*),
- and provides information that changes a command in a specific way.

common DIR switches

/P	**pause** at end of each screen
/W	list files in **wide** format
/B	**bare** list (just the filename)
/L	use **lowercase** characters
/S	list files in current directory and **subdirectories**
/O	list files in a specified **order** (default is alphabetical)

NOTE: This exercise deals only with DIR **switches**. Some other DOS commands use switches too.

STEPS to

STEPS to are on the next page.

❸ List your files wide:

NOTE: With the "wide" switch you can see more files on the screen, but the file size, date, and time are not displayed.

- **Type** `DIR/W` ↵

```
Volume in drive A is LEARNING
Volume Serial Number is XXXX-XXXX
Directory of A:\

[GAMES]         [FOOD]          [PROGRAMS]      JONES.LET       [BAK]
SMITH.LET       LOPEZ.LET       LETTER1         REPORT3         LETTER2
CLUE.GAM        CORN.VEG        RADISH.VEG      POTATOES.VEG    PUDDING.DES
LOPEZ.RPT       REPORT1         SMITH.RPT       SMITH.MEM       TRIVIA.GAM
MEMO3           LOPEZ.MEM       LETTER3         JONES.MEM       JONES.RPT
JELLO.DES       OLDMAID.GAM     MEMO1           MEMO2           REPORT2
HELLO           HURRAH          NOT
      33 file(s)                    430 bytes
                                 XXXXXX bytes free

A:\>
```

subdirectory — *filename extension* — *current directory* — *bytes used* — *bytes available* — *filename*

❹ List your files in alphabetical order:

- **Type** `DIR/O` ↵

```
LETTER1                7 05-02-93    8:15p
LETTER2                7 05-02-93    8:16p
LETTER3                7 05-02-93    8:22p
LOPEZ      LET         9 05-02-93    8:13p
LOPEZ      MEM         9 05-02-93    8:21p
LOPEZ      RPT         9 05-02-93    8:19p
MEMO1                  5 05-02-93    8:24p
MEMO2                  5 05-02-93    8:24p
MEMO3                  5 05-02-93    8:21p
NOT                   60 05-25-93    9:37p
OLDMAID    GAM        11 05-02-93    8:23p
POTATOES   VEG        12 05-02-93    8:18p
PUDDING    DES        11 05-02-93    8:19p
RADISH     VEG        10 05-02-93    8:17p
REPORT1                7 05-02-93    8:20p
REPORT2                7 05-02-93    8:25p
REPORT3                7 05-02-93    8:16p
SMITH      LET         9 05-02-93    8:13p
SMITH      MEM         9 05-02-93    8:20p
SMITH      RPT         9 05-02-93    8:20p
TRIVIA     GAM        10 05-02-93    8:21p
      33 file(s)          430 bytes
                       XXXXXX bytes free

A:\>
```

❺ Combine two switches (order and pause):

- **Type** `DIR/O/P` ↵
  The first screenful appears in alphabetical order.
- **Press** any key.
  The second (and final) screenful appears.

❻ List just the filenames (bare list):

- **Type** `DIR/B` ↵
  Just the filenames appear.

❼ List the files in lowercase characters:

- **Type** `DIR/L` ↵
  The filenames appear in lowercase characters.

❽

- **Go on** to Exercise 10
  or **take** the disk out of drive A: and turn the computer off.

STEPS to

Use switches with the DIR command

1 **Type** `DIR`
2 **Type** /
3 **Type** a switch:
   - P pause
   - W wide
   - B bare
   - L lowercase
   - S subdirectory files
   - C compressed files
   - O specific order
   - A attributes
4 **Press** ↵

Use more than one switch with the DIR command

1 **Type** `DIR`
2 **Type** /
3 **Type** a switch.
4 Repeat steps 2 and 3 until all desired switches are typed.
5 **Press** ↵

❶ • If necessary, **access** the Learning Disk on drive A: and **change** to this common DOS prompt: `A:\>`

❷ List files alphabetically by filename extension:

• **Type** `DIR/O:E` ↵

DOS displays files alphabetically by filename extension.

```
REPORT2                7 05-02-93   8:25p
HELLO                 99 05-25-93   9:36p
HURRAH                54 05-02-93   8:40p
NOT                   60 05-25-93   9:37p
PUDDING   DES         11 05-02-93   8:19p
JELLO     DES          9 05-02-93   8:23p
CLUE      GAM          8 05-02-93   8:17p
TRIVIA    GAM         10 05-02-93   8:21p
OLDMAID   GAM         11 05-02-93   8:23p
JONES     LET          9 05-02-93   7:48p
SMITH     LET          9 05-02-93   8:13p
LOPEZ     LET          9 05-02-93   8:13p
SMITH     MEM          9 05-02-93   8:20p
LOPEZ     MEM          9 05-02-93   8:21p
JONES     MEM          9 05-02-93   8:22p
LOPEZ     RPT          9 05-02-93   8:19p
SMITH     RPT          9 05-02-93   8:20p
JONES     RPT          9 05-02-93   8:23p
CORN      VEG          8 05-02-93   8:17p
RADISH    VEG         10 05-02-93   8:17p
POTATOES  VEG         12 05-02-93   8:18p
       33 file(s)          430 bytes
                     XXXXXX bytes free
A:\>
```

❸ List your files from small to large:

• **Type** `DIR/O:S` ↵

DOS displays files in order by file size.

```
REPORT2                7 05-02-93   8:25p
CLUE      GAM          8 05-02-93   8:17p
CORN      VEG          8 05-02-93   8:17p
JONES     LET          9 05-02-93   7:48p
SMITH     LET          9 05-02-93   8:13p
LOPEZ     LET          9 05-02-93   8:13p
LOPEZ     RPT          9 05-02-93   8:19p
SMITH     RPT          9 05-02-93   8:20p
SMITH     MEM          9 05-02-93   8:20p
LOPEZ     MEM          9 05-02-93   8:21p
JONES     MEM          9 05-02-93   8:22p
JONES     RPT          9 05-02-93   8:23p
JELLO     DES          9 05-02-93   8:23p
RADISH    VEG         10 05-02-93   8:17p
TRIVIA    GAM         10 05-02-93   8:21p
PUDDING   DES         11 05-02-93   8:19p
OLDMAID   GAM         11 05-02-93   8:23p
POTATOES  VEG         12 05-02-93   8:18p
HURRAH                54 05-02-93   8:40p
NOT                   60 05-25-93   9:37p
HELLO                 99 05-25-93   9:36p
       33 file(s)          430 bytes
                     XXXXXX bytes free
A:\>
```

❹ • **Experiment** as desired with other DIR *order* switch options. You will get an error message if DOS does not understand your instructions, but that will not hurt anything. For example, try:

DIR/O:-N *(lists filenames in order from Z to A)*

DIR/O:-D *(lists date and time in order from last to first)*

DIR/O:-G *(lists directories below files)*

❺ • **Go on** to Exercise 11
or **take** the disk out of drive A: and turn the computer off.

EXERCISE 10

DIR and switches with options

To vary the way a *switch* changes the DIR command by adding an *option* at the end of the switch.

OBJECTIVES:

- define *switch option*
- use *order* switch options to list your files in different orders, such as:
  - by filename
  - by file extension
  - by file size
  - by file date
  - with directories listed first or last

- Terms and Notes -

switch option
A code which:
- comes at the end of a switch,
- begins with a colon (:),
- and provides optional information that changes a *switch* in a specific way.

NOTE: A switch option must immediately follow the **switch** it is meant to change.

order switch options

Code	Resulting Order
`:n`	name-(A–Z) (default)
`:-n`	name-(Z–A)
`:e`	filename extension-(A–Z)
`:-e`	filename extension-(Z–A)
`:d`	date and time-first to last
`:-d`	date and time-last to first
`:s`	size-smallest to largest
`:-s`	size-largest to smallest
`:g`	directories listed above files
`:-g`	directories listed below files

STEPS to

Use the *order* switch options with the DIR command

1 Type `DIR/O:`
2 Type desired *order* option (see above).
3 Press ↵

EXERCISE 11

DIR and wildcards

To use *wildcards* with the DIR command to identify and list certain *groups of files* within a directory.

OBJECTIVES:

- define wildcards
- define the **?** wildcard
- define the ***** wildcard
- use wildcards with the DIR command to list *groups of files* that meet certain conditions, such as:
  - they all begin with "m"
  - they all end with "txt"
  - they all begin with "m" *and* end with "txt"
- see what happens when you enter a "bad" command

– Terms and Notes –

wildcard
A symbol that represents other characters. Wildcards are used to help you select specific *groups of files.*

`*` represents a *group of characters*
`?` represents any *single character*

For example:

`*.LET` will list the *group of files* that have .LET filename extensions.

`M*.*` will list the *group of files* that start with the letter "M."

`*.*` will list *all the files* in a directory.

NOTE: Wildcards are also useful with other DOS commands, such as COPY and DEL.

STEPS to

Use wildcards with the DIR command

1 **Type** `DIR`

2 **Type** a combination of *filename characters* and *wildcards* that define the files you want to list.

FOR EXAMPLE, to list all the files which begin with "L" type:

```
DIR L*.*
```

3 **Press** ↵

❶ • If necessary, **access** the Learning Disk on drive A: and **change** to this common DOS prompt: `A:\>`

❷ List files that end with .VEG:

• **Type** `DIR *.VEG` ↵

```
CORN       VEG          8 05-02-93    8:17p
RADISH     VEG         10 05-02-93    8:17p
POTATOES   VEG         12 05-02-93    8:18p
```

NOTE: In an effort to save space, "result boxes" may show only the relevant part of your screen display. For example, in the "result box" above, just the files ending with .VEG are displayed rather than the entire screen display, which includes information about the disk, current directory, number of files, and bytes.

❸ List files that begin with L:

• **Type** `DIR L*.*` ↵

```
LOPEZ      LET          9 05-02-93    8:13p
LETTER1                 7 05-02-93    8:15p
LETTER2                 7 05-02-93    8:16p
LOPEZ      RPT          9 05-02-93    8:19p
LOPEZ      MEM          9 05-02-93    8:21p
LETTER3                 7 05-02-93    8:22p
```

❹ Purposely specify files that do not exist:

• **Type** `DIR *.DOC` ↵

DOS reports that no file matches this filename pattern.

```
File not found
```

❺ List the MEMO files:

• **Type** `DIR MEMO?` ↵

```
MEMO3                   5 05-02-93    8:21p
MEMO1                   5 05-02-93    8:24p
MEMO2                   5 05-02-93    8:24p
```

❻ List files with a filename extension of .LET:

• **Type** `DIR *.LET` ↵

```
JONES      LET          9 05-02-93    7:48p
SMITH      LET          9 05-02-93    8:13p
LOPEZ      LET          9 05-02-93    8:13p
```

❼ List files whose extensions end with T:

• **Type** `DIR *.??T` ↵

```
JONES      LET          9 05-02-93    7:48p
SMITH      LET          9 05-02-93    8:13p
LOPEZ      LET          9 05-02-93    8:13p
LOPEZ      RPT          9 05-02-93    8:19p
SMITH      RPT          9 05-02-93    8:20p
JONES      RPT          9 05-02-93    8:23p
```

❽ List all the JONES files:

• **Type** `DIR JONES.*` ↵

```
JONES      LET          9 05-02-93    7:48p
JONES      MEM          9 05-02-93    8:22p
JONES      RPT          9 05-02-93    8:23p
```

❾ • **Go on** to Exercise 12
or **take** the disk out of drive A: and turn the computer off.

Redirecting DOS's output

Unless you specify otherwise, DOS sends *output* (the results of your DOS commands) to the *screen*. If you want DOS to send *output* elsewhere, you must *redirect* the *output*. To *redirect* output *to the printer*, add the *redirect character* (>) and P R N to the end of a DOS command.

1. • If necessary, **access** the Learning Disk on drive A: and **change** to this common DOS prompt: `A:\>`

2. • Be sure the printer is turned on and ready to receive information.

3. • **Type** `DIR>PRN` ↵
   DOS sends output to the printer.

4. **If necessary, force the printer to "feed" your paper:**

*NOTE: When you send information to the printer from DOS, no "page feed" code is sent. To force the paper out of the printer, **most** printers require you to first turn the "on line" light off and then press the printer's "form feed" button.*

- Turn the "on line" light **off** (located on your printer).
- **Press** the "form feed" button.
- Turn the "on line" light back **on**.

```
 Volume in drive A is LEARNING
 Volume Serial Number is XXXX-XXXX
 Directory of A:\

GAMES          <DIR>      05-02-93   7:46p
FOOD           <DIR>      05-02-93   7:46p
PROGRAMS       <DIR>      05-22-93   8:41p
JONES     LET          9 05-02-93   7:48p
BAK            <DIR>      05-22-93   8:43p
SMITH     LET          9 05-02-93   8:13p
LOPEZ     LET          9 05-02-93   8:13p
LETTER1                7 05-02-93   8:15p
REPORT3                7 05-02-93   8:16p
LETTER2                7 05-02-93   8:16p
CLUE      GAM          8 05-02-93   8:17p
CORN      VEG          8 05-02-93   8:17p
RADISH    VEG         10 05-02-93   8:17p
POTATOES  VEG         12 05-02-93   8:18p
PUDDING   DES         11 05-02-93   8:19p
LOPEZ     RPT          9 05-02-93   8:19p
REPORT1                7 05-02-93   8:20p
SMITH     RPT          9 05-02-93   8:20p
SMITH     MEM          9 05-02-93   8:20p
TRIVIA    GAM         10 05-02-93   8:21p
MEMO3                  5 05-02-93   8:21p
LOPEZ     MEM          9 05-02-93   8:21p
LETTER3                7 05-02-93   8:22p
JONES     MEM          9 05-02-93   8:22p
JONES     RPT          9 05-02-93   8:23p
JELLO     DES          9 05-02-93   8:23p
OLDMAID   GAM         11 05-02-93   8:23p
MEMO1                  5 05-02-93   8:24p
MEMO2                  5 05-02-93   8:24p
REPORT2                7 05-02-93   8:25p
HELLO                 99 05-25-93   9:36p
HURRAH                54 05-02-93   8:40p
NOT                   60 05-25-93   9:37p
       33 file(s)          430 bytes
                       XXXXXX bytes free
```

Continue Exercise 12 on the next page...

EXERCISE 12

Redirect output to the printer

To use a code which tells DOS to send the *output* of your command to the *printer* rather than the *screen*.

OBJECTIVES:

- send your *directory list* to the printer
- force the printer to "feed" paper that does not have a "page feed" code
- combine several DIR outputs on one piece of paper

- Terms and Notes -

PRN (printer)
DOS's name for the printer.

output
The *results* of your DOS command, *normally* displayed on the screen.

redirect
To change (redirect) the place a command *gets information from* or *sends information to*.

redirect character	redirect action
>	Send output of a command to a *file* or *device* (such as a printer).
<	Get the input needed for a command from a *file* (rather than the keyboard).
>>	Add output from a command to the *end* of a file.

NOTE: The redirect characters '<' and '>>' are not covered in this book.

STEPS to

Redirect output to the printer
1 Type the desired command.
2 Type >PRN
3 Press ↵

Exercise 12 (continued)
Redirect output to the printer

5 **Send an alphabetical directory list to the printer:**

- **Type** `DIR/O>PRN` ↵
- **Force** the printer to "feed" your paper (review step 4).

```
 Volume in drive A is LEARNING
 Volume Serial Number is XXXX-XXXX
 Directory of A:\

BAK          <DIR>      05-22-93   8:43p
FOOD         <DIR>      05-02-93   7:46p
GAMES        <DIR>      05-02-93   7:46p
PROGRAMS     <DIR>      05-22-93   8:41p
CLUE     GAM             8 05-02-93   8:17p
CORN     VEG             8 05-02-93   8:17p
HELLO                   99 05-25-93   9:36p
HURRAH                  54 05-02-93   8:40p
JELLO    DES             9 05-02-93   8:23p
JONES    LET             9 05-02-93   7:48p
JONES    MEM             9 05-02-93   8:22p
JONES    RPT             9 05-02-93   8:23p
LETTER1                  7 05-02-93   8:15p
LETTER2                  7 05-02-93   8:16p
LETTER3                  7 05-02-93   8:22p
LOPEZ    LET             9 05-02-93   8:13p
LOPEZ    MEM             9 05-02-93   8:21p
LOPEZ    RPT             9 05-02-93   8:19p
MEMO1                    5 05-02-93   8:24p
MEMO2                    5 05-02-93   8:24p
MEMO3                    5 05-02-93   8:21p
NOT                     60 05-25-93   9:37p
OLDMAID  GAM            11 05-02-93   8:23p
POTATOES VEG            12 05-02-93   8:18p
PUDDING  DES            11 05-02-93   8:19p
RADISH   VEG            10 05-02-93   8:17p
REPORT1                  7 05-02-93   8:20p
REPORT2                  7 05-02-93   8:25p
REPORT3                  7 05-02-93   8:16p
SMITH    LET             9 05-02-93   8:13p
SMITH    MEM             9 05-02-93   8:20p
SMITH    RPT             9 05-02-93   8:20p
TRIVIA   GAM            10 05-02-93   8:21p
       33 file(s)          430 bytes
                        XXXXXX bytes free
```

6 **Send four different DIR commands to the printer:**

This step will combine the output from four DIR commands on one piece of paper.

- **Type** `DIR SMITH.*>PRN` ↵
- **Type** `DIR *.LET>PRN` ↵
- **Type** `DIR *.VEG>PRN` ↵
- **Type** `DIR L*.*>PRN` ↵

Exercise 12 continued...

7 • If necessary, **force** the printer to "feed" the paper (review, step 4).

```
 Volume in drive A is LEARNING
 Volume Serial Number is XXXX-XXXX
 Directory of A:\

SMITH    LET          9 05-02-93   8:13p
SMITH    RPT          9 05-02-93   8:20p
SMITH    MEM          9 05-02-93   8:20p
       3 file(s)          27 bytes
                       XXXXXX bytes free

 Volume in drive A is LEARNING
 Volume Serial Number is XXXX-XXXX
 Directory of A:\

JONES    LET          9 05-02-93   7:48p
SMITH    LET          9 05-02-93   8:13p
LOPEZ    LET          9 05-02-93   8:13p
       3 file(s)          27 bytes
                       XXXXXX bytes free

 Volume in drive A is LEARNING
 Volume Serial Number is XXXX-XXXX
 Directory of A:\

CORN     VEG          8 05-02-93   8:17p
RADISH   VEG         10 05-02-93   8:17p
POTATOES VEG         12 05-02-93   8:18p
       3 file(s)          30 bytes
                       XXXXXX bytes free

 Volume in drive A is LEARNING
 Volume Serial Number is XXXX-XXXX
 Directory of A:\

LOPEZ    LET          9 05-02-93   8:13p
LETTER1               7 05-02-93   8:15p
LETTER2               7 05-02-93   8:16p
LOPEZ    RPT          9 05-02-93   8:19p
LOPEZ    MEM          9 05-02-93   8:21p
LETTER3               7 05-02-93   8:22p
       6 file(s)          48 bytes
                       XXXXXX bytes free
```

8 • **Go on** to Exercise 13
or **take** the disk out of drive A: and turn the computer off.

EXERCISE 13

TREE

Displays the directory structure on a disk.

OBJECTIVES:

- show the *directory structure* of the current directory
- identify paths to specific locations
- identify directory levels and branches
- show the *directory structure* of a different directory
- show the *directory structure* of a different disk drive
- show the *directory structure* one screenful at a time

- Terms and Notes -

directory
The part of the disk structure that holds files and/or other directories.

subdirectory
A directory that is within another directory (called the parent directory).

NOTE: Strictly speaking, all directories other than the **root directory** are **subdirectories.** But it is more common to call them **directories.** In this book, the term **subdirectory** is used only to show the relationship between two directories.

parent directory
The directory immediately above a subdirectory.

root directory
The main, first-level directory on a disk. The root directory is represented as:
\ in the path, and
A:. in the TREE command.

directory structure
The organization of directories on a disk.

directory branch
A directory and all of the levels of directories that are under it.

Directory structure

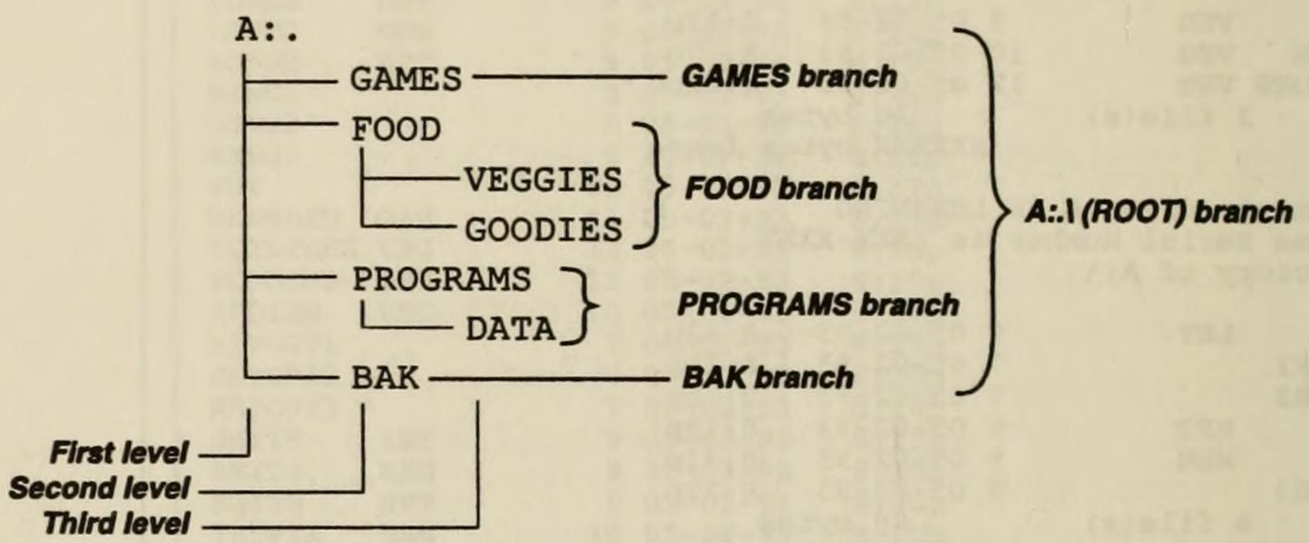
Every disk has a main directory called the **root directory**. The root directory is the *first-level* directory.

Other directories **branch** off the root directory like *limbs* on a **tree**. These *second-level* directories are *subdirectories* of the *root directory*, and the *root directory* is the **parent** of the second-level subdirectories.

Second-level directories can be **parents** to additional directories. These *third-level* directories are subdirectories of their *parent directory*.

The TREE command displays the **directory structure** of the **current directory's** branch. If the *current directory* is the *root directory*, TREE will display every directory on the disk.

Directory branches and levels



Telling DOS where to go

When you want to tell DOS how to get to a specific location in the *directory structure*, you must enter a **path**. For example, the **path** to files in the GOODIES directory is: \FOOD\GOODIES

*NOTE: The first backslash (\) represents the **root directory** (which the TREE command shows as **A:.**). Subsequent backslashes separate **directories** within the path.*

1 • If necessary, **access** the Learning Disk on drive A: and **change** to this common DOS prompt: `A:\>`

2 **Display directory structure of current directory:**

• **Type** `TREE` ↵

```
Directory PATH listing for Volume LEARNING
Volume Serial Number is XXXX-XXXX
 A:.
   GAMES
   FOOD
      VEGGIES
      GOODIES
   PROGRAMS
      DATA
   BAK
```

***IMPORTANT:** TREE is an **external command**. If you get a **Bad command or file name** message, C:\DOS is not in the PATH command of your AUTOEXEC.BAT file. However, you can probably complete this exercise if you:*
***Type** PATH C:\DOS ↵ and repeat step 2 (see Exercise 66, page 168).*

Exercise 13 continued...

❸ Understanding directory levels, branches, and paths:

- On a piece of paper:
  1. Write the **path** to the VEGGIES directory.
  2. Write the **path** to the DATA directory.
  3. Write the **level-one** directory.
  4. Write all the **level-two** directories.
  5. Write all the directories within the **FOOD branch**.
  6. Write all the directories within the **ROOT branch**.

  Check your answers in Appendix H.

  Examples:
  The **path** to GOODIES is: \FOOD\GOODIES
  The directory within the **PROGRAM branch** is: DATA
  The **level-three** directories are: VEGGIES, GOODIES, and DATA

❹ Display directory structure of different directory:

- **Type** `TREE \FOOD` ↵

```
A:\FOOD
    VEGGIES
    GOODIES
```

❺ Display directory structure of a different disk drive:

- **Type** `TREE C:\` ↵

  The directory structure scrolls past. Drive C: will probably have a tree structure that fills more than one screenful.

❻ Display tree output one screenful at a time:

*NOTE: In this step, you will use the **pipe character** (|) and a **pipe command**, MORE. Since the MORE command sends **output** to a **file** on your disk before it displays the results on your screen, and since your disk may be write-protected, you will change to drive C: to do this step. While this piping command is very useful for displaying output one screenful at a time, piping will not be covered further in this book.*

- **Type** `C:` ↵ (to change to drive C:)

```
C:\>
```

- **Type** `TREE|MORE` ↵

  The first screenful appears with `-- More --` *at the bottom.*
- **Press** any key to get the next screenful.

  The next screenful appears with `-- More --` *at the bottom.*
- **Continue** pressing "any key" until the DOS prompt appears.

```
C:\>
```

- **Change** back to drive A: (review, Exercise 3).

```
A:\>
```

❼

- **Go on** to Exercise 14
  or **take** the disk out of drive A: and turn the computer off.

Exercise 13 (continued)
TREE

directory levels
The tiers of directory levels, starting with the root directory as level one.

current directory
The directory you are in. (See the next exercise to learn how to change directories (CD).)

path
The list of directories that DOS goes through to find a directory or file.

pipe
The process in which the *output* of one command (or program) becomes the *input* for another command (or program).

MORE
The "pipe" command which displays one screenful of output at a time.

STEPS to

Display the directory structure of the current directory

- Type `TREE` ↵

Display the directory structure of a different directory

1 Type `TREE`
2 Type the path to the desired directory.
3 Press ↵

Display the directory structure on a different drive

1 Type `TREE`
2 Press Space
3 Type the desired drive.
  For example: `C:`
4 Press ↵

Display the directory structure one screenful at a time

- Type `TREE|MORE` ↵

EXERCISE 14

CD (change directory)

Changes directories or displays the *current* directory.

OBJECTIVES:

- display the *current* directory
- change to a *subdirectory* (one level down)
- change to a *parent* directory (one level up)
- change more than one directory *level* down at one time
- change to the *root* directory
- change from one directory *branch* to another

– Terms and Notes –

current directory
The directory you are "currently" working in. If your DOS prompt is changed to show the common prompt (that is, the **current drive and path** and the **greater-than sign**), then the last directory shown in the prompt is the *current* directory.

parent directory
The directory immediately above the *current* directory (or immediately above any particular subdirectory).

Changing Directories

You use CD (by itself) to *display* the *current directory*. To *change directories*, you must tell DOS what *directory* to change to. But realize that DOS cannot *change* to just *any* directory by using CD and the directory name—unless that directory is a *subdirectory*, you must show DOS the *path* to the desired directory.

DOS can move	using
- to a subdirectory	CD and the name of the subdirectory
- to a parent directory	CD..
- to the root directory	CD\
- to a different directory branch	CD\ and the *path from the root directory*, for example, \FOOD\GOODIES
- *down* more than one directory level	CD and the *path from the current* directory to the desired directory

*NOTE: You can **always** move to **any** directory (on the current disk drive) by typing CD and the **entire path** to the directory, starting with the **root** directory (\).*

Knowing Where You Are

Often you are not familiar with the *directory structure* you are working with. The *directory structure* on the Learning Disk is pretty simple. Study the Learning Disk's *directory structure* (page 38) so you will be more aware of where you are in the directory structure while doing this exercise. When working in directories, ASK YOURSELF THESE TWO QUESTIONS:

- What does the prompt say?
- What directory am I in?

❶ • If necessary, **access** the Learning Disk on drive A: and **change** to this common DOS prompt: `A:\>`

❷ Display the current directory:

- **Type** `CD` ↵
  NOTE: The current directory is the ROOT directory.

```
A:\
A:\>
```

❸ Change to a subdirectory of the current directory:

(or move down one level in the directory structure)

- **Type** `CD FOOD` ↵
  NOTE: FOOD is a subdirectory of the ROOT directory.

```
A:\FOOD>
```

- **Type** `CD GOODIES` ↵
  NOTE: GOODIES is a subdirectory of FOOD.

```
A:\FOOD\GOODIES>
```

❹ Change to the parent directory (..):

(or move up one level in the directory structure)

- **Type** `CD..` ↵
  NOTE: FOOD is a parent directory of GOODIES.

```
A:\FOOD>
```

- **Type** `CD..` ↵
  NOTE: The ROOT directory is a parent directory of FOOD.

```
A:\>
```

Exercise 14 continued...

❺ Change more than one directory level at a time:

- **Type** CD FOOD\GOODIES ↵

*NOTE: In order to move down multiple levels, you must name every directory in the path which leads from the **current directory** to the desired directory.*

```
A:\FOOD\GOODIES>
```

❻ Change to the root directory (\):

- **Type** CD\ ↵

NOTE: Simply type CD\ to move to the root directory from any other directory.

```
A:\>
```

❼ Change to a different directory branch:

(start path from the root directory)

First change to one directory branch:

- **Type** CD \FOOD ↵

```
A:\FOOD>
```

Now change to a different directory branch:

- **Type** CD \GAMES ↵

*NOTE: To move from one **branch** to another **branch**, you must start with the **root** directory, and type the entire path to the desired directory.*

```
A:\GAMES>
```

Now change to yet a different directory branch:

- **Type** CD \PROGRAMS ↵

```
A:\PROGRAMS>
```

❽

- **Change** to the *root* directory (review, step 6).

```
A:\>
```

❾ Change to the DATA directory:

- **Type** CD PROGRAMS\DATA ↵

NOTE: From the root directory, you can change to any directory by typing the path to the desired directory, starting with the subdirectory.

```
A:\PROGRAMS\DATA>
```

❿ Purposely change to an invalid directory:

- **Type** CD VEGGIES ↵

NOTE: You know you have a VEGGIES directory, but you have not given DOS enough information to find it, so DOS displays an "invalid directory" message.

```
Invalid directory
```

⓫ Now change to the VEGGIES directory correctly:

- **Type** CD \FOOD\VEGGIES ↵

NOTE: To change to a different directory branch, you must type the entire path, starting with the root directory.

```
A:\FOOD\VEGGIES>
```

Exercise 14 continued...

WARNING: If you know where you are within the directory structure, you can use the CD command to move down one or more levels by entering the path **from the current directory**. But, if you are not sure where you are when using the CD command, it is best to use the entire path **from the root directory** to the desired location. Using the path starting **from the root directory** always works.

STEPS to

Change to a subdirectory

1 Type CD
2 Press Space
3 Type the subdirectory name.
4 Press ↵

Change to the parent directory

- Type CD.. ↵

Change to the root directory

- Type CD\ ↵

Change to a directory more than one level down

1 Type CD
2 Press Space
3 Type the subdirectory name.
4 Type \
5 Type the next directory name.
6 Repeat steps 4 and 5 until path is complete.
7 Press ↵

Change to a directory in a different branch

1 Type CD\
2 Type the first directory in the path.
3 Type \
4 Type the next directory in the path.
5 Repeat steps 3 and 4 until path is complete.
6 Press ↵

12 • **Change** to the *parent* directory (review, step 4).

```
A:\FOOD>
```

13 **Change to the GAMES directory:**

• **Type** CD \GAMES ↵

```
A:\GAMES>
```

14 • **Change** to the *root* directory (review, step 6).

```
A:\>
```

15 • **Change** to the FOOD subdirectory (review, step 3).

```
A:\FOOD>
```

16 • **Type** TREE ↵
(to get a picture of just the FOOD directory branch)

NOTE: Just as GAMES, FOOD, AND PROGRAMS are ***branches*** *of the ROOT directory, VEGGIES and GOODIES are* ***branches*** *of the FOOD directory.*

```
A:.
    VEGGIES
    GOODIES
```

17 • **Change** to the GOODIES subdirectory (review, step 3).

```
A:\FOOD\GOODIES>
```

18 • **Change** to the *parent* directory (review, step 4).

```
A:\FOOD>
```

19 • **Change** to the VEGGIES subdirectory (review, step 3).

```
A:\FOOD\VEGGIES>
```

20 • **Use** the CLS command to clear the screen.

```
A:\FOOD\VEGGIES>
```

21 • **Display** the *current* directory (review, step 2).

```
A:\FOOD\VEGGIES
A:\FOOD\VEGGIES>
```

22 • **Change** to the *root* directory (review, step 6).

```
A:\>
```

23 • **Go on** to Exercise 15
or **take** the disk out of drive A: and turn the computer off.

New ways to use DIR

Now that you are familiar with:
- the DIR command,
- the CD (change directory) command,
- the *directory structure*, and
- paths,

you can use the DIR command to examine files in directories *other* than the *root directory*.

Telling DIR where to work

You tell DIR where to work by pointing DOS to the *directory* you want it to *list*. You type DIR followed by the *path* to the desired directory.

For example: from the *root* directory, you can tell DOS to *list* the contents of the DATA directory by typing: `DIR PROGRAMS\DATA` ↵

Or from the VEGGIES directory, you can tell DOS to *list* the contents of the DATA directory by typing: `DIR \PROGRAMS\DATA` ↵

NOTE: In this second example, since the root directory is not current, you must tell DOS to start its search from the root directory by typing \ at the beginning of the path.

Unless you point DOS to a different directory, DOS will work in the *current directory*.

Automatically created directories

When a new directory is created, DOS automatically creates two directories within the new directory:

1. a *current* directory, represented by a single dot (.), and
2. a *parent* directory, represented by two dots (..).

These two directories are used by DOS to help keep track of the directory structure (i.e., to help DOS find the directories you point it to). You do not have to be concerned about them.

❶ • If necessary, **access** the Learning Disk on drive A: and **change** to this common DOS prompt: `A:\>`

❷ • **Change** to the VEGGIES directory (review, Exercise 14).

```
A:\FOOD\VEGGIES>
```

❸ List the contents of the VEGGIES directory:

• **Type** `DIR` ↵

*DOS lists the **current** directory, the **parent** directory and five files. DOS adds the directories and files together and tells you that there are 7 file(s) in the directory.*

```
 Volume in drive A is LEARNING
 Volume Serial Number is XXXX-XXXX
 Directory of A:\FOOD\VEGGIES

.              <DIR>      05-02-93   8:27p
..             <DIR>      05-02-93   8:27p
CABBAGE  VEG            11 05-02-93   8:47p
CARROTS  VEG            11 05-02-93   8:47p
KALE     VEG             8 05-02-93   8:47p
LETTUCE  VEG            11 05-02-93   8:47p
CELERY   VEG            10 05-02-93   8:48p
        7 file(s)             51 bytes
                       XXXXXX bytes free
```

current directory →
parent directory →
five files →
7 files

Exercise 15 continued...

EXERCISE 15

More DIR

This exercise combines the DIR command with different *paths* and *drives* to let you examine any directory on any disk drive in your computer system.

OBJECTIVES:
- list the contents of a *current* directory that is not the root directory
- list the contents of a *subdirectory* of the *current* directory
- list the contents of a directory in a different *branch*
- list the contents of a directory on a *disk drive* that is not *current*

STEPS to

List files on current directory
1 **Change** to the desired directory.
2 **Type** `DIR` ↵

List files on a subdirectory
1 **Type** `DIR`
2 **Press** Space
3 **Type** the subdirectory name.
4 **Press** ↵

List files on a different drive
1 **Type** `DIR`
2 **Press** Space
3 **Type** the desired drive.
4 **Press** ↵

List files in a specific directory on a different drive
1 **Type** `DIR`
2 **Press** Space
3 **Type** the desired drive.
4 **Type** the path to the desired directory.
5 **Press** ↵

WARNING: If you know where you are in the **directory structure**, you can start your **path** from the **current** directory and go down one or more levels. However, it is safer to start your **path** with the **root** directory.

- Starting a **path** from the **current** directory saves extra typing, but
- starting a **path** from the **root** directory always works, no matter where you are in the directory structure.

4 • **Change** to the *parent* directory of VEGGIES (review, Exercise 14).

```
A:\FOOD >
```

5 **List the contents of the FOOD directory:**

• **Type** DIR ↵

*DOS lists the **current directory** (.), the **parent directory** (..) and two **subdirectories** of FOOD (VEGGIES and GOODIES).*

```
 Volume in drive A is LEARNING
 Volume Serial Number is XXXX-XXXX
 Directory of A:\FOOD

.            <DIR>      05-02-93   7:46p
..           <DIR>      05-02-93   7:46p
VEGGIES      <DIR>      05-02-93   8:27p
GOODIES      <DIR>      05-02-93   8:28p
       4 file(s)              0 bytes
                        XXXXXX bytes free
```

6 • **Change** to the *root* directory (review, Exercise 14).

```
A:\>
```

• **Type** DIR/P ↵

The first screenful of files appears.

• **Press** any key.

The second (and last) screenful of files appears and the DOS prompt is displayed.

```
A:\>
```

7 **List the contents of a subdirectory:**

*NOTE: You should be in the **root** directory with this DOS prompt showing: **A:\>** Since the root directory is current, you do not need to start the path with \.*

• **Type** DIR GAMES ↵

*DOS list the **current** and **parent** directories again (every directory except the **root** directory has these two directories) and three files.*

```
 Volume in drive A is LEARNING
 Volume Serial Number is XXXX-XXXX
 Directory of A:\GAMES

.            <DIR>      05-02-93   7:46p
..           <DIR>      05-02-93   7:46p
ASTRO    GAM          9 05-02-93   8:48p
CHESS    GAM          9 05-02-93   8:48p
JEOPARDY GAM         12 05-02-93   8:49p
       5 file(s)             30 bytes
                        XXXXXX bytes free
```

• **Type** DIR BAK ↵

*This directory is empty except for the **current** and **parent** directories.*

```
 Volume in drive A is LEARNING
 Volume Serial Number is XXXX-XXXX
 Directory of A:\BAK

.            <DIR>      05-22-93   8:43p
..           <DIR>      05-22-93   8:43p
       2 file(s)              0 bytes
                        XXXXXX bytes free
```

Exercise 15 continued...

8 List the contents of a directory in a different branch:

- **Change** to the FOOD subdirectory (review, Exercise 14).

```
A:\FOOD>
```

- **Type** `DIR \GAMES` ↵

*NOTE: When pointing DOS to a **different branch**, you must begin the path with \ (the root directory).*

```
 Volume in drive A is LEARNING
 Volume Serial Number is XXXX-XXXX
 Directory of A:\GAMES

.            <DIR>      05-02-93   7:46p
..           <DIR>      05-02-93   7:46p
ASTRO    GAM            9 05-02-93   8:48p
CHESS    GAM            9 05-02-93   8:48p
JEOPARDY GAM           12 05-02-93   8:49p
       5 file(s)          30 bytes
                       XXXXXX bytes free
```

- **Type** `DIR \PROGRAMS\DATA` ↵

```
 Volume in drive A is LEARNING
 Volume Serial Number is XXXX-XXXX
 Directory of A:\PROGRAMS\DATA

.            <DIR>      05-22-93   8:43p
..           <DIR>      05-22-93   8:43p
MEMBER   DB             9 05-25-93   9:28p
CLUB     DB             7 05-25-93   9:29p
MUSIC    DB             8 05-25-93   9:29p
REPORT   DOC           10 05-25-93   9:30p
SCRIPT   DOC           10 05-25-93   9:30p
PAYROLL  WK            10 05-25-93   9:31p
SALES    WK             8 05-25-93   9:31p
AGENDA   DOC           10 05-25-93   9:32p
GRADES   WK             9 05-25-93   9:32p
      11 file(s)          81 bytes
                       XXXXXX bytes free
```

9 List the contents of the root directory on drive C:

- **Type** `DIR C:\` ↵

The filenames scroll past on the screen, and the last item to appear is the DOS prompt for drive A:.

```
A:\FOOD>
```

10 List the contents of the DOS directory on drive C:

- **Type** `DIR C:\DOS` ↵

Again, the filenames scroll past on the screen, and the last item to appear is the DOS prompt for drive A:.

```
A:\FOOD>
```

11 Print a list of the DOS directory on drive C:

- **Make sure** that the printer is ready to receive data.
- **Type** `DIR C:\DOS>PRN` ↵

The first page is printed and ejected from the printer.

- **Force** the second page out (review, Exercise 12, step 4).

12

- **Change** to the *root* directory (review, Exercise 14).

```
A:\>
```

13

- **Go on** to Exercise 16
  or **take** the disk out of drive A: and turn the computer off.

Exercise 15 (continued)
More DIR

sending DIR to a different disk drive
You can point DOS to a different drive by typing the desired drive in front of the *path*.

For example:

From drive A:, you can tell DOS to *list* the contents of the *DOS* directory on drive C: by typing:

`DIR C:\DOS` ↵

NOTE: Since drive A: remains the **current** drive, the DOS prompt returns to drive A: after the command has been carried out.

EXERCISE 16

Practice

LESSON TWO
Exploring Directories

OBJECTIVE:

- with Exercise 17, review the following tasks from the exercises in Lesson Two:

  DIR—list contents of directory
  DIR and switches
  DIR and switches with options
  DIR and wildcards
  Redirect output to the printer
  Force printer to eject your paper
  TREE—display directory structure

  CD—change directory
  display the current directory
  change to a subdirectory
  change to the parent directory
  change to the root directory
  change more than one directory level
  change to a different directory branch

  More DIR
  list current directory
  list a subdirectory
  list a different branch
  list a different drive
  list a specific directory on a different drive

Hints

The bolded term at the beginning of each exercise step gives a clue about the command that should be used to complete the step. For example:

bolded term	command used
List	DIR
Change	CD
Display	TREE or CD
Redirect	>PRN

The commands to perform each step are listed in Appendix I. Try to complete the exercise without looking at the Appendix for help.

❶ If necessary, **access** the Learning Disk on drive A:, and **change** to this common DOS prompt: `A:\>`

❷ **List** the contents of the *current* directory (it should be the root) of the Learning Disk.

❸ **List** the contents of the *root* directory on drive C:.

❹ **List** the *current* directory, pausing after each screenful.

❺ **List** the *current* directory wide.

```
[GAMES]       [FOOD]        [PROGRAMS]    JONES.LET       [BAK]
SMITH.LET     LOPEZ.LET     LETTER1       REPORT3         LETTER2
CLUE.GAM      CORN.VEG      RADISH.VEG    POTATOES.VEG    PUDDING.DES
LOPEZ.RPT     REPORT1       SMITH.RPT     SMITH.MEM       TRIVIA.GAM
MEMO3         LOPEZ.MEM     LETTER3       JONES.MEM       JONES.RPT
JELLO.DES     OLDMAID.GAM   MEMO1         MEMO2           REPORT2
HELLO         HURRAH        NOT
          33 file(s)          430 bytes
                        XXXXXX bytes free
```

❻ **Change** *more than one directory level* to the DATA directory.

```
A:\PROGRAMS\DATA>
```

❼ **List** the contents of the DATA directory.

```
.            <DIR>      05-22-93   8:43p
..           <DIR>      05-22-93   8:43p
MEMBER   DB           9 05-25-93   9:28p
CLUB     DB           7 05-25-93   9:29p
MUSIC    DB           8 05-25-93   9:29p
REPORT   DOC         10 05-25-93   9:30p
SCRIPT   DOC         10 05-25-93   9:30p
PAYROLL  WK          10 05-25-93   9:31p
SALES    WK           8 05-25-93   9:31p
AGENDA   DOC         10 05-25-93   9:32p
GRADES   WK           9 05-25-93   9:32p
      11 file(s)          81 bytes
                    XXXXXX bytes free
```

❽ **List** the DATA directory in ORDER.

```
AGENDA   DOC         10 05-25-93   9:32p
CLUB     DB           7 05-25-93   9:29p
GRADES   WK           9 05-25-93   9:32p
MEMBER   DB           9 05-25-93   9:28p
MUSIC    DB           8 05-25-93   9:29p
PAYROLL  WK          10 05-25-93   9:31p
REPORT   DOC         10 05-25-93   9:30p
SALES    WK           8 05-25-93   9:31p
SCRIPT   DOC         10 05-25-93   9:30p
      11 file(s)          81 bytes
 ↑                  XXXXXX bytes free
```

❾ **List** the DATA directory in ORDER by the *size* option.

```
CLUB     DB           7 05-25-93   9:29p
MUSIC    DB           8 05-25-93   9:29p
SALES    WK           8 05-25-93   9:31p
MEMBER   DB           9 05-25-93   9:28p
GRADES   WK           9 05-25-93   9:32p
REPORT   DOC         10 05-25-93   9:30p
SCRIPT   DOC         10 05-25-93   9:30p
PAYROLL  WK          10 05-25-93   9:31p
AGENDA   DOC         10 05-25-93   9:32p
      11 file(s)   ↑      81 bytes
                    XXXXXX bytes free
```

Exercise 16 continued...

10 **List** the files which end with .DOC.

```
REPORT   DOC          10 05-25-93   9:30p
SCRIPT   DOC          10 05-25-93   9:30p
AGENDA   DOC          10 05-25-93   9:32p
       3 file(s)           30 bytes
                     XXXXXX bytes free
```

11 **List** the files which begin with M.

```
MEMBER   DB            9 05-25-93   9:28p
MUSIC    DB            8 05-25-93   9:29p
       2 file(s)           17 bytes
                     XXXXXX bytes free
```

12 **Change** to the *root* directory.

```
A:\>
```

13 **Display** the *directory structure.*

```
Directory PATH listing for Volume LEARNING
Volume Serial Number is XXXX-XXXX
 A:.
   ├───GAMES
   ├───FOOD
   │       ├───VEGGIES
   │       └───GOODIES
   ├───PROGRAMS
   │       └───DATA
   └───BAK
```

14 **Change** *more than one directory level* to the GOODIES directory.

```
A:\FOOD\GOODIES
```

15 **List** the *current* directory.

```
SAME AS STEP 17
```

16 **Redirect** the **list** of the current directory to the printer.

17 **Force** the printer to eject your paper.

```
 Volume in drive A is LEARNING
 Volume Serial Number is XXXX-XXXX
 Directory of A:\FOOD\GOODIES

.            <DIR>      05-02-93   8:28p
..           <DIR>      05-02-93   8:28p
CAKE     DES            8 05-02-93   8:45p
COOKIES  DES           11 05-02-93   8:46p
ICECREAM DES           12 05-02-93   8:46p
PIE      DES            7 05-02-93   8:46p
       6 file(s)           38 bytes
                     XXXXXX bytes free
```

18 **Change** to the *root* directory.

```
A:\>
```

19 **Go on** to Exercise 17
or **take** the disk out of drive A: and turn the computer off.

EXERCISE 17

Practice

LESSON TWO
Exploring Directories

OBJECTIVE:

- with Exericse 16, review the following tasks from the exercises in Lesson Two:

DIR—list contents of directories
DIR and switches
DIR and switches with options
DIR and wildcards
Redirect output to the printer
Force printer to eject your paper
TREE—display directory structure

CD—change directory
display the current directory
change to a subdirectory
change to the parent directory
change to the root directory
change more than one directory level
change to a different directory branch

More DIR
list current directory
list a subdirectory
list a different branch
list a different drive
list a specific directory on a different drive

Hints

The bolded term at the beginning of each exercise step gives a clue about the command that should be used to complete the step. For example:

bolded term	command used
List	DIR
Change	CD
Display	TREE or CD
Redirect	>PRN

1 If necessary, **access** the Learning Disk on drive A:, and **change** to this common DOS prompt: `A:\>`

2 **Change** *more than one directory level* to the VEGGIES directory.

```
A:\FOOD\VEGGIES>
```

3 **Display** the *directory structure.*

```
A:\FOOD\VEGGIES
A:\FOOD\VEGGIES>
```

4 **List** the *current* directory.

```
.           <DIR>      05-02-93   8:27p
..          <DIR>      05-02-93   8:27p
CABBAGE  VEG          11 05-02-93   8:47p
CARROTS  VEG          11 05-02-93   8:47p
KALE     VEG           8 05-02-93   8:47p
LETTUCE  VEG          11 05-02-93   8:47p
CELERY   VEG          10 05-02-93   8:48p
       7 file(s)          51 bytes
                     XXXXXX bytes free
```

5 **Redirect** a **list** of the *current* directory to the printer. Do not print yet.

6 **List** the contents of a *different branch*—GOODIES.

NOTE: Even though VEGGIES and GOODIES are both within the FOOD branch, they begin separate branches as they branch off the FOOD directory.

```
.           <DIR>      05-02-93   8:28p
..          <DIR>      05-02-93   8:28p
CAKE     DES           8 05-02-93   8:45p
COOKIES  DES          11 05-02-93   8:46p
ICECREAM DES          12 05-02-93   8:46p
PIE      DES           7 05-02-93   8:46p
       6 file(s)          38 bytes
                     XXXXXX bytes free
```

7 While still in the VEGGIES directory, **redirect** the **list** of the GOODIES directory to the printer. *HINT: The first part is just like step 6.*

8 **Force** the printer to eject your paper.

```
 Volume in drive A is LEARNING
 Volume Serial Number is XXXX-XXXX
 Directory of A:\FOOD\VEGGIES

.           <DIR>      05-02-93   8:27p
..          <DIR>      05-02-93   8:27p
CABBAGE  VEG          11 05-02-93   8:47p
CARROTS  VEG          11 05-02-93   8:47p
KALE     VEG           8 05-02-93   8:47p
LETTUCE  VEG          11 05-02-93   8:47p
CELERY   VEG          10 05-02-93   8:48p
       7 file(s)          51 bytes
                     XXXXXX bytes free

 Volume in drive A is LEARNING
 Volume Serial Number is XXXX-XXXX
 Directory of A:\FOOD\GOODIES

.           <DIR>      05-02-93   8:28p
..          <DIR>      05-02-93   8:28p
CAKE     DES           8 05-02-93   8:45p
COOKIES  DES          11 05-02-93   8:46p
ICECREAM DES          12 05-02-93   8:46p
PIE      DES           7 05-02-93   8:46p
       6 file(s)          38 bytes
                     XXXXXX bytes free
```

Exercise 17 continued...

9 **Change** to the *parent* directory.

```
A:\FOOD>
```

10 **Change** to the *parent* directory again (it is the root directory).

```
A:\>
```

11 **List** a *subdirectory* of the root directory—BAK.

```
.            <DIR>      05-22-93   8:43p
..           <DIR>      05-22-93   8:43p
       2 file(s)              0 bytes
                        XXXXXX bytes free
```

12 **List** a *subdirectory* of the root directory—FOOD.

```
.            <DIR>      05-02-93   7:46p
..           <DIR>      05-02-93   7:46p
VEGGIES      <DIR>      05-02-93   8:27p
GOODIES      <DIR>      05-02-93   8:28p
       4 file(s)              0 bytes
                        XXXXXX bytes free
```

13 **Change** to the PROGRAMS *subdirectory* of the root directory.

```
A:\PROGRAMS>
```

14 **List** the contents of a *different branch*—BAK.

```
SAME AS STEP 11
```

15 **List** the contents of a *different branch*—FOOD.

```
SAME AS STEP 12
```

16 **Change** to a *different branch*—FOOD.

```
A:\FOOD>
```

17 **Display** the *directory structure.*

```
A:.
    VEGGIES
    GOODIES
```

18 **Change** to the *root* directory.

```
A:\>
```

19 **List** the files on a *different drive*—C:.

The files flash by, and the last item to appear is the DOS prompt for drive A:.

20 **List** the files in a *specific directory* on a *different drive*—the DOS directory on drive C:.

The files flash by, and the last item to appear is the DOS prompt for drive A:.

21 **Go on** to Worksheet 7.

If desired, **take** the disk out of drive A: and turn the computer off.

WORKSHEET 7

EXERCISES 8, 9, 10, 11, and 12

NAME _____

DIRECTIONS: Use the following terms to fill in the blanks below.

prn	wildcards	DIR (directory)	DIR and switches with options
switch	directory	DIR and switches	Redirect output to the printer
output	scrolling	DIR and wildcards	
redirect	switch option		

1. The DOS command that displays a list of files and/or directories in a directory. 1. _____

2. To use *wildcards* with the DIR command to list certain *groups of files* within a directory. 2. _____

3. To vary the way a *switch* changes the DIR command by adding an *option* at the end of the switch. 3. _____

4. Symbols that represent a character or group of characters and are used to help you select specific *groups of files*.
   * represents a *group of characters* and ? represents any *single character*. 4. _____

5. An optional code at the end of a command that directs the command to vary in a specific way. 5. _____

6. The *result* of your DOS command that is normally displayed on the screen. 6. _____

7. An optional code at the end of a *switch* that begins with a colon (:) and provides information that changes a *switch* in a specific way. 7. _____

8. To use a code to tell DOS to send the *output* of your command to the *printer* rather than the *screen*. 8. _____

9. DOS's name for the printer. 9. _____

10. The vertical movement of files on the screen. 10. _____

11. To change the place a command *gets information from* or *sends information to*. 11. _____

12. The part of the disk structure that holds *files* and/or other *directories*. 12. _____

13. To change the way DOS *normally* displays the contents of a directory by adding a *switch* to the end of the DIR command. 13. _____

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WORKSHEET 8

EXERCISES 13, 14, and 15

NAME _____

DIRECTIONS: Use the following terms to fill in the blanks below.

path	directory	directory branch	current directory	MORE
TREE	root directory	directory levels	directory structure	pipe character
More DIR	subdirectory	parent directory	CD (change directory)	

1. The DOS command that displays the directory structure of a disk. 1. _____

2. This exercise combines the DIR command with different paths and drives to let you examine any directory on any disk drive in your computer system. 2. _____

3. A directory that is within another directory (called the parent directory). 3. _____

4. The route to a specific location in DOS's system of directories. 4. _____

5. The part of the disk structure that holds files and/or other directories. 5. _____

6. The directory immediately above the *current* directory (or immediately above any particular subdirectory). 6. _____

7. The main (first level) directory on a disk. 7. _____

8. The DOS command to change the *current* directory. 8. _____

9. A directory and all of the levels of directories that are under it. 9. _____

10. The tiers of subdirectory layers, starting with the root directory as level one. 10. _____

11. The organization of directories on a disk. 11. _____

12. The directory you are working in. 12. _____

13. The "pipe" command which displays one screenful of output at a time. 13. _____

14. The process in which the *output* of one command (or program) becomes the *input* for another command (or program). 14. _____

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WORKSHEET 9

LESSON TWO, Questions and Commands

NAME _____

1. What command lists files and/or directories? 1. _____
2. What optional code changes the way a command normally works? 2. _____
3. What command displays the directory structure on a disk? 3. _____
4. What command changes directories? 4. _____

WHAT IS THE DOS COMMAND TO:

5. List the contents of the current directory. 5. _____
6. List the contents of a *subdirectory* named DATA. 6. _____
7. List the contents of the current directory, pausing at the end of each screenful. 7. _____
8. List the contents of the current directory in wide format. 8. _____
9. List the contents of the current directory using the order switch. 9. _____
10. List the contents of the current directory in *order* of date from last to first. 10. _____
11. List the *group of files* that begin with M. 11. _____
12. List the *group of files* in the current directory that end with the extension .DOC. 12. _____
13. List the *group of files* in the current directory that begin with L and have the extension .TXT. 13. _____
14. Redirect a list of the contents of the current directory to the printer. 14. _____
15. Redirect a list of the group of files in the current directory that begin with S to the printer. 15. _____
16. Display the directory structure in the current directory. 16. _____
17. Display the directory structure of a *subdirectory* named FOOD. 17. _____
18. Change directory to a *subdirectory* named GOODIES. 18. _____
19. Change directory to the *parent* directory. 19. _____
20. Change directory to the *root* directory. 20. _____

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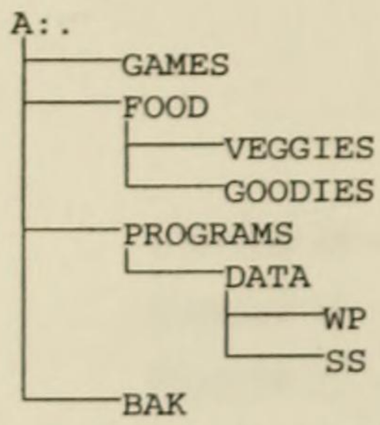
WORKSHEET 10

LESSON TWO, Questions and Commands

NAME _____

Use the following *directory structure* for commands 1 through 8 below.
NOTE: This directory structure has two directories not on the Learning Disk (WP and SS).



WHAT IS THE COMMAND TO:

1. Change directory from FOOD to GAMES. 1. _____

2. Change directory from DATA to GOODIES. 2. _____

3. Change directory (*down* more than one level) from PROGRAMS to WP. 3. _____

4. Change directory (to a different branch) from WP to SS. 4. _____

5. Change directory from VEGGIES to GOODIES. 5. _____

6. With FOOD the *current* directory, list the files in the GOODIES directory. 6. _____

7. With FOOD the *current* directory, list the files in the GAMES directory. 7. _____

8. With PROGRAMS the *current* directory, list the files in the SS directory. 8. _____

9. With drive A: current, list the files in drive C:. 9. _____

10. With drive A: current, list the files in the *root* directory on drive C:. 10. _____

11. With drive A: current, list the files in the DOS directory on drive C:. 11. _____

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Lesson Three
Frequently Used DOS Commands

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EXERCISE 18
DISKCOPY

Copies the entire contents of a floppy disk (the *source* disk) onto another floppy disk (the *target* disk).

OBJECTIVES:

- identify the DISKCOPY guidelines
- write-protect your original disk
- use DISKCOPY to duplicate the Learning Disk
- use the verify switch with DISKCOPY
- label your duplicate disk

- Terms and Notes -

NOTE: You can use either a formatted or unformatted disk with the DISKCOPY command.

NOTE: DISKCOPY works only on removable disks (not the hard disk).

WARNING: When you use DISKCOPY, any existing data on the **target** disk will be destroyed.

external command
A DOS command that is stored in a file and that is accessible only if it can be reached on the disk and directory on which it is stored.

source disk
The disk to copy from when doing a DISKCOPY.

target disk
The disk to copy to when doing a DISKCOPY.

verify switch (/v)
An optional addition to the DISKCOPY command that tells DOS to compare the source and target disks during the copy.

write-protect
To use a procedure that will protect a disk from being changed in any way while still allowing you to read the information on the disk.

write-protect tab
A small, self-adhesive tab that often comes packaged with disk labels and is used to cover the write-enable notch on a 5¼" floppy disk.

Duplicate Learning Disk

For this exercise you need to provide a disk that matches the Learning Disk in size and density. You will copy the Learning Disk to your disk and name it Duplicate Learning Disk. You will make many changes on the Duplicate Learning Disk in Lesson Three, but they are *not* permanent changes since you will recopy the original Learning Disk to the Duplicate Learning Disk at the end of Lesson Three.

Why use DISKCOPY?

When you purchase new software, it is a good idea to use DISKCOPY to make duplicate copies so you have a "back up" in case one set of software becomes damaged.

DISKCOPY guidelines

- The *target* disk must be the **same size** and **density** as the *source* disk.
- It is advisable to **write-protect** the original disk before starting the DISKCOPY procedure, because it is easy to accidentally switch the source and target disks, which can ruin the data on your original disk.

❶ Write-protect the ORIGINAL Learning Disk:

- 3½" disk: **Slide** the *write-protect* tab so that it is open.
  OR
- 5¼" disk: **Place** a *write-protect tab* over the notch on the side.

❷

- **Access** the Learning Disk on drive A: and **change** to this common DOS prompt: A:\> (if necessary).

❸ Start the DISKCOPY procedure:

*IMPORTANT: DISKCOPY is an **external command**. If you get a **Bad command or file name** message, C:\DOS is not in the PATH command of your AUTOEXEC.BAT file. However, you can probably complete this exercise if you type PATH C:\DOS ↵ and repeat step 3 (see Exercise 66, page 168).*

- **Type** `DISKCOPY A: A: /V` ↵
  *NOTE: You can use the **verify** switch (/V) to confirm that the source and destination disks are identical, but it is not necessary and it slows down the DISKCOPY process.*

```
Insert the SOURCE disk in drive A:

Press any key to continue . . .
```

❹ Follow the DISKCOPY prompts:

- **Place** the original Learning Disk in drive A: (it should already be there).
  NOTE: The original Learning Disk is either:
  an HD (1.44MB) 3½" floppy disk or
  an HD (1.2MB) 5¼" floppy disk
- **Press** any key to start copying.

```
Copying XXX tracks
XX sectors per track, 2 side(s)

Insert TARGET diskette in drive A:

Press any key to continue . . .
```

- **Place** the *target* disk in drive A:.
  NOTE: The target disk must be the same size and density as the original—either:
  an HD (1.44MB) 3½" floppy disk or
  an HD (1.2MB) 5¼" floppy disk

Exercise 18 continued...

- **Press** any key to continue.
- **Continue** exchanging the *source* and *target* disks as prompted.
  NOTE: If you are copying a DD 5¼" disk, you will not have to exchange disks further. If you are copying any other density and size disk, you will have to exchange disks again. Since DOS can store only 640K of information in its memory at one time, it has to do the DISKCOPY job (moving data back and forth between memory and disks) in pieces. (See DOS 6.2 note in the side column.)
- When the copy is complete, DOS displays this message:

```
Volume Serial Number is XXXX-XXXX
Copy another diskette (Y/N)?
```

NOTE: The only thing that DISKCOPY does not copy exactly is the volume serial number. If the source disk has a volume serial number, DOS creates a new one for the destination disk and displays that number when DISKCOPY is complete.

❺ End the DISKCOPY procedure:

- **Type** N

```
A:\>
```

❻ Label the DUPLICATE Learning Disk:

- **Remove** the new disk from drive A:.
- **Write** information about the disk on a label:
  Disk Name: Duplicate Learning Disk
  Date: Today's date
  Name: Your name (if you are in a class)
- **Place** the label on the disk.
  NOTE: If you place the label on a 5¼" disk before the label is filled out, use a felt-tip pen to write on label so you won't damage the disk.
- **Place** the DUPLICATE Learning Disk back in drive A:.

❼ Change to drive A:

- **Change** to the root directory (review, Exercise 14).

```
C:\>
```

- **Change** to drive A: (review, Exercise 4).

```
A:\>
```

❽ List the files and display the directory structure on the disk:

- **Type** DIR/P ↵
  The first screenful of files appears. Do the files match those on the Learning Disk?
- **Press** any key.
  The last screenful of files appears.
- **Type** TREE ↵

```
Directory PATH listing for Volume LEARNING
Volume Serial Number is XXXX-XXXX
A:.
    GAMES
    FOOD
        VEGGIES
        GOODIES
    PROGRAMS
        DATA
    BAK
```

❾ • **Go on** to Exercise 19
or **take** the disk out of drive A: and turn the computer off.

Exercise 18 (continued)
DISKCOPY

DOS 6.2 NOTE: Because DOS 6.2 uses hard disk space when copying floppy disks, it does not require multiple disk swaps, even with disks that have capacities greater than 360K.

STEPS to

Copy a disk

1 Select one way to Diskcopy:

From drive A: to drive A:
- **Type** DISKCOPY A: A: ↵

From drive B: to drive B:
- **Type** DISKCOPY B: B: ↵

From drive A: to drive B:
- **Type** DISKCOPY A: B: ↵
  NOTE: If drive A: and drive B: are the same size, you can copy a disk from one drive to another without switching disks.

2 **Follow** the prompts carefully.

EXERCISE 19

COPY a file to the same directory

COPY is the DOS command that duplicates file(s). When you copy a file to the same directory as the original file, you *must* give the duplicate file a new filename.

OBJECTIVES:

- use DIR to check files before and after copying
- copy one file from the *current* directory to the *current* directory, renaming the duplicate file

– Terms and Notes –

WARNING: You can lose data when copying. If the name you assign the duplicate file is the same as an existing file, DOS will **overwrite the existing file with the new file** without warning you (except for DOS 6.2 – see note below).

DOS 6.2 NOTE: Unlike earlier versions of DOS, DOS 6.2 warns you and asks for your confirmation before overwriting a file with the same filename as the one you are copying.

overwrite a file
To replace the contents of one file with the contents of another file.

STEPS to

Copy a file from the current directory to the current directory

1 **Type** COPY
2 **Press** Space
3 **Type** the filename to copy.
4 **Press** Space
5 **Type** the new filename.
6 **Press** ↵

Why copy files?

- To make a *backup* file in case the original is damaged.
- To use files on a different computer.
- To put your files on the faster hard disk to speed up your work.
- To create a file based on the contents of another file.

Copying a file to the same directory

Because a directory cannot have two files with the same name, when you copy a file from one directory to the *same* directory you must give the duplicate file a new name. You assign the new name when you type the COPY command. For example:

```
COPY  JONES.LET  JONES.BAK
 ↑       ↑          ↑
command  original filename  new filename
```

❶ Use the DUPLICATE Learning Disk created with DISKCOPY:

*NOTE: Do not **write-protect** the DUPLICATE Learning Disk since write-protection keeps a disk from being changed in any way, and this lesson asks you to make changes.*

- If necessary, **access** the DUPLICATE Learning Disk on drive A: and **change** to this common DOS prompt: `A:\>`

❷ List the files with JONES filenames to check them:

- **Type** `DIR JONES.*` ↵

```
JONES    LET          9 05-02-93   7:48p
JONES    MEM          9 05-02-93   8:22p
JONES    RPT          9 05-02-93   8:23p
       3 file(s)         27 bytes
                      XXXXXX bytes free
```

*NOTE: Using DIR **before and after** copying files gives you a better sense of what files you have and the results of your command.*

❸ Copy JONES.LET to JONES.BAK:

- **Type** `COPY JONES.LET JONES.BAK` ↵

DOS reports a successful copy.

```
1 file(s) copied
```

❹ Check to see that the new file is there:

- **Type** `DIR JONES.*` ↵

```
JONES    LET          9 05-02-93   7:48p
JONES    MEM          9 05-02-93   8:22p
JONES    RPT          9 05-02-93   8:23p
JONES    BAK          9 05-02-93   7:48p
       4 file(s)         36 bytes
                      XXXXXX bytes free
```

NOTE: When a file is copied, the new file keeps the same date and time as the original file. Since JONES.BAK arrived on the disk last, DOS lists it below the other files.

- **Type** `DIR` ↵

The filenames flash past, but you can see that the last file listed is JONES.BAK.

❺

- **Go on** to Exercise 20

or **take** the disk out of drive A: and turn the computer off.

Copying a group of files to the same directory

Copying a *group of files* to the *same* directory is different than copying just one file to the *same* directory because:

- instead of typing an original *filename* and a new *filename*,
- you type an original **filename pattern** and a new **filename pattern** (which identify the group of files you want to copy).

For example:

```
COPY  *.GAM  *.BAK
 ↑     ↑      ↑
command  original  new
         filename  filename
         pattern   pattern
```

A **filename pattern** represents a group of files that have some filename parts that are the same, and some filename parts that are different. **Filename patterns** use **wildcards** to represent the parts of the filenames that are different and **characters** to represent the parts of the filename that are the same. For example, in `*.GAM`, the **wildcard** (*) represents the part of the filename which is different for each file in a group, and the characters, .GAM, represent the part of the filename that is the same for each file in the group.

1

- If necessary, **access** the DUPLICATE Learning Disk on drive A: and **change** to this common DOS prompt: `A:\>`

2 **Copy the files with .GAM extensions to files with .BAK extensions:**

- **Type** `DIR *.GAM` ↵

```
CLUE     GAM          8 05-02-93    8:17p
TRIVIA   GAM         10 05-02-93    8:21p
OLDMAID  GAM         11 05-02-93    8:23p
        3 file(s)          29 bytes
                     XXXXXX bytes free
```

- **Type** `COPY *.GAM *.BAK` ↵

DOS reports a successful copy.

```
CLUE.GAM
TRIVIA.GAM
OLDMAID.GAM
        3 file(s) copied
```

- **Type** `DIR *.BAK` ↵

```
JONES    BAK          9 05-02-93    7:48p
CLUE     BAK          8 05-02-93    8:17p
TRIVIA   BAK         10 05-02-93    8:21p
OLDMAID  BAK         11 05-02-93    8:23p
        4 file(s)          38 bytes
                     XXXXXX bytes free
```

- **Type** `DIR` ↵

The filenames flash past, but you can see that new .BAK files are the last three listed.

3 **Print a list of the root directory:**

- **Type** `DIR>PRN` ↵
- **Force** the printer to eject the paper.

NOTE: The result is shown in Appendix H.

4

- **Go on** to Exercise 21
  or **take** the disk out of drive A: and turn the computer off.

EXERCISE 20

COPY a group of files to the same directory

COPY is the DOS command that duplicates file(s). When you copy *multiple* files to the same directory as the original files, you *must* give the duplicate files new filenames.

OBJECTIVES:

- use DIR to check files before and after copying
- identify *filename patterns*
- copy more than one file from the *current* directory to the *current* directory, renaming the duplicate files

- Terms and Notes -

filename pattern
A combination of *characters* and *wildcards* that represents a group of files.

wildcards
Symbols that stand for *any* single character (?) or *any* group of consecutive characters (*) in a DOS command.

STEPS to

Copy a group of files from the current directory to the current directory

1 Type `COPY`
2 Press Space
3 Type the filename pattern of files to copy.
4 Press Space
5 Type the new filename pattern that identifies the duplicate files.
6 Press ↵

EXERCISE 21

COPY files to different directories

COPY is the DOS command that duplicates file(s). When you copy files to *different directories*, you can either *keep the original filenames* or *rename* the duplicate files.

OBJECTIVES:

- use DIR to check files before and after copying
- identify the path to the directory you want to copy to
- copy *one file* from the current directory to a different directory
- copy *a group of files* from the current directory to a different directory
- copy a *group of files* from the current directory to a different directory and *rename* the duplicate files
- copy *all of the files* from the current directory to a different directory

– Terms and Notes –

WARNING: If you copy files to a directory that does not exist, DOS will assume that you want to copy the file or group of files to a single file with the filename of that nonexistent directory.
For example, if you mean to copy files ending with .VEG to the VEGGIES directory but you accidentally issue this command:

```
COPY *.VEG \FOOD\VEGE
```

DOS will copy the contents of all the files ending with .VEG to a single file named VEGE in the FOOD directory.

NOTE: Copying multiple files to a single file is called "concatenation," and it is a useful feature that is intentionally included in DOS, but not covered in this book.

Copying files to different directories

When you copy files to a *different* directory you must tell DOS where to send the files by typing the path in the COPY command. For example:

```
COPY   COOKIES.DES   \FOOD\GOODIES
 ↑          ↑              ↑
command   filename       path
```

When you copy files to a *different* directory, you can either change the duplicate filenames or keep their original names. For example:

- *To keep the original filename, type:* `COPY COOKIES.DES \FOOD\GOODIES`
- *To change the filename, type:* `COPY COOKIES.DES \FOOD\GOODIES\COOKY.YUM`

1 • If necessary, **access** the DUPLICATE Learning Disk on drive A: and **change** to this common DOS prompt: `A:\>`

2 **Copy one file from the current directory to a different directory:**
(copy JONES.BAK to the BAK directory)
With this prompt showing: A:\>

- **Type** `DIR JONES.BAK` ↵

```
JONES    BAK          9 05-02-93   7:48p
```

- **Type** `COPY JONES.BAK \BAK` ↵

```
1 file(s) copied
```

- **Type** `DIR \BAK` ↵

You can see that DOS copied JONES.BAK to the BAK directory.

```
 Directory of A:\BAK

.            <DIR>      06-22-93  10:43p
..           <DIR>      06-22-93  10:43p
JONES    BAK          9 05-02-93   7:48p
       3 file(s)              9 bytes
                       XXXXXX bytes free
```

3 **Copy a group of files from the current directory to a different directory:**
(copy all the files ending with .VEG to the VEGGIES directory)
With this prompt showing: A:\>

- **Type** `DIR *.VEG` ↵

```
CORN     VEG          8 05-02-93   8:17p
RADISH   VEG         10 05-02-93   8:17p
POTATOES VEG         12 05-02-93   8:18p
       3 file(s)             30 bytes
                       XXXXXX bytes free
```

- **Type** `COPY *.VEG \FOOD\VEGGIES` ↵

```
CORN.VEG
RADISH.VEG
POTATOES.VEG
       3 file(s) copied
```

- **Type** `DIR \FOOD\VEGGIES\` ↵

The .VEG files just copied are displayed at the bottom of the list.

```
CORN     VEG          8 05-02-93   8:17p
RADISH   VEG         10 05-02-93   8:17p
POTATOES VEG         12 05-02-93   8:18p
      10 file(s)             81 bytes
                       XXXXXX bytes free
```

Exercise 21 continued...

❹ Copy a group of files from the current directory to a different directory and rename them:

(copy LETTER? to the \BAK directory and rename them with a .BAK extension)

- **Type** `DIR LETTER?` ↵

  *NOTE: Remember that "?" is a **wildcard** that represents a single character.*

```
LETTER1              7 05-02-93   8:15p
LETTER2              7 05-02-93   8:16p
LETTER3              7 05-02-93   8:22p
       3 file(s)          21 bytes
                       XXXXXX bytes free
```

- **Type** `COPY LETTER? \BAK\LETTER?.BAK` ↵

  *NOTE: When you rename duplicate files that are being copied to a different directory, you type the new **filename pattern** after you type the **path**.*

```
LETTER1
LETTER2
LETTER3
       3 file(s) copied
```

- **Type** `DIR \BAK` ↵

```
 Directory of A:\BAK

.            <DIR>      06-22-93  10:43p
..           <DIR>      06-22-93  10:43p
JONES    BAK           9 05-02-93   7:48p
LETTER1  BAK           7 05-02-93   8:15p
LETTER2  BAK           7 05-02-93   8:16p
LETTER3  BAK           7 05-02-93   8:22p
       6 file(s)          30 bytes
                       XXXXXX bytes free
```

❺ Copy all of the files from the current directory to a different directory:

- **Change** to the GAMES directory (review, Exercise 14).

```
A:\GAMES>
```

- **Type** `COPY *.* \BAK` ↵

  *NOTE: The *.* filename pattern represents all the files in a directory.*

```
ASTRO.GAM
CHESS.GAM
JEOPARDY.GAM
       3 file(s) copied
```

- **Type** `DIR \BAK` ↵

```
 Directory of A:\BAK

.            <DIR>      05-22-93   8:43p
..           <DIR>      05-22-93   8:43p
JONES    BAK           9 05-02-93   7:48p
LETTER1  BAK           7 05-02-93   8:15p
LETTER2  BAK           7 05-02-93   8:16p
LETTER3  BAK           7 05-02-93   8:22p
ASTRO    GAM           9 05-02-93   8:48p
CHESS    GAM           9 05-02-93   8:48p
JEOPARDY GAM          12 05-02-93   8:49p
       9 file(s)          60 bytes
                       XXXXXX bytes free
```

- **Change** back to the *root* directory (review, Exercise 14).

```
A:\>
```

❻ Print a list of the files in the BAK directory:

- **Type** `DIR \BAK >PRN` ↵
- **Force** the printer to eject the paper.

  NOTE: The result should match the result above.

❼

- **Go on** to Exercise 22

  or **take** the disk out of drive A: and turn the computer off.

Exercise 21 (continued)
COPY files to different directories

copying to a different drive:
Copying files to a different drive is very common.
This book does not ask you to copy to a different disk drive because we do not want to ask you to copy files on drive C: and we do not know if you have a drive B:.
To copy files to a different drive, simply add the drive to the beginning of the destination path as shown in these examples:

```
COPY TEST.DOC B:\
COPY TEST.DOC C:\WP\DOC
```

NOTE: While the DISKCOPY command copies an *entire* disk and requires that the source and target disks be *identical* in size and density, when you use the COPY command you can copy files between different disks regardless of the disks' density and size (you do need to have enough bytes free on the receiving disk to store the particular file(s) you are copying).

STEPS to

Copy file(s) from the current directory to a different directory

1 Type `COPY`
2 Press Space
3 Type the filename or filename pattern of file(s) to copy.
4 Press Space
5 Type the path to the new directory.
6 Press ↵

Copy file(s) from the current directory to different directory and rename the duplicate file(s)

1 Type `COPY`
2 Press Space
3 Type the filename or filename pattern of file(s) to copy.
4 Press Space
5 Type the path to the new directory.
6 Type \
7 Type the new filename or filename pattern.
8 Press ↵

Copy all the files from the current directory to a different directory

1 Type `COPY *.*`
2 Press Space
3 Type the path to the new directory.
4 Press ↵

EXERCISE 22

DEL (delete)

Removes files from a disk.

OBJECTIVES:

- delete a *file* in the current directory
- delete a *group of files* in the current directory
- change directory (CD) before deleting files
- use a path to delete files in a different directory
- delete *all* the files in a directory

– Terms and Notes –

NOTE: The ERASE command performs the same actions as the DEL command and can be substituted for the DEL command.

STEPS to

Delete file(s) from the current directory

1 **Type** DEL
2 **Press** Space
3 **Type** filename or filename pattern of file(s) to delete.
4 **Press** ↵

Delete file(s) from a different directory

1 **Type** DEL
2 **Press** Space
3 **Type** the path to the directory.
4 **Type** \
5 **Type** filename or filename pattern of file(s) to delete.
6 **Press** ↵

Delete all files from the *current* directory

1 **Type** DEL *.* ↵
DOS asks: Are you sure (Y/N)?
2 **Type** Y ↵

Deleting a file—is it final?

Deleting a file removes its *filename* from DOS's *list of filenames.* But the information in the file remains on the disk *until DOS stores some other information in that location.* With MS-DOS 5 or 6, you can use the UNDELETE command (Exercise 23) to restore the file as long as no other file has physically replaced the original information.

❶ • If necessary, **access** the DUPLICATE Learning Disk on drive A: and **change** to this common DOS prompt: A:\>

❷ Delete a file from the current directory:

- **Type** DIR JONES.BAK ↵
  There is a copy of JONES.BAK in the current directory.

```
JONES    BAK          9 05-02-93   7:48p
       1 file(s)              9 bytes
                       XXXXXX bytes free
```

- **Type** DEL JONES.BAK ↵
  DOS simply displays a new DOS prompt. But the drive A: light goes on, which indicates that there has been some action. You will list the file again to see if it is there.
- **Type** DIR JONES.BAK ↵

```
File not found
```

❸ Delete one file from a different directory:

(delete RADISH.VEG from the VEGGIES directory)

- **Type** DIR \FOOD\VEGGIES\RADISH.VEG ↵

```
RADISH   VEG         10 05-02-93   8:17p
       1 file(s)             10 bytes
                       XXXXXX bytes free
```

- **Type** DEL \FOOD\VEGGIES\RADISH.VEG ↵
- **Type** DIR \FOOD\VEGGIES\RADISH.VEG ↵

```
File not found
```

❹ Delete a group of files from the current directory

With this prompt showing: A:\>

- **Type** DIR *.RPT ↵

```
LOPEZ    RPT          9 05-02-93   8:19p
SMITH    RPT          9 05-02-93   8:20p
JONES    RPT          9 05-02-93   8:23p
       3 file(s)             27 bytes
                       XXXXXX bytes free
```

- **Type** DEL *.RPT ↵
- **Type** DIR *.RPT ↵

```
File not found
```

❺ Change to a different directory (cd) and delete a group of files from the new current directory:

- **Type** CD \FOOD\VEGGIES
- **Type** DIR C*.* ↵

```
CABBAGE  VEG         11 05-02-93   8:47p
CARROTS  VEG         11 05-02-93   8:47p
CELERY   VEG         10 05-02-93   8:48p
CORN     VEG          8 05-02-93   8:17p
       4 file(s)             40 bytes
                       XXXXXX bytes free
```

Exercise 21 continued...

- **Type** DEL C*.* ↵
- **Type** DIR C*.* ↵

```
File not found
```

- **Type** CD\ ↵ (to return to the ROOT directory)

❻ Delete a group of files from a different directory:

With this prompt showing: A:\>

- **Type** DIR \BAK*.BAK ↵

```
JONES    BAK          9 05-02-93   7:48p
LETTER1  BAK          7 05-02-93   8:15p
LETTER2  BAK          7 05-02-93   8:16p
LETTER3  BAK          7 05-02-93   8:22p
        4 file(s)          30 bytes
                     XXXXXX bytes free
```

You want to delete only the LETTER files. What *file pattern* can you use to accomplish that?

- **Type** DEL \BAK\LETTER?.BAK ↵
  NOTE: These filename patterns would work also: L.*, L*.BAK or LETTER*.BAK.*
- **Type** DIR \BAK*.BAK ↵

```
JONES    BAK          9 05-02-93   7:48p
        1 file(s)          9 bytes
                     XXXXXX bytes free
```

❼ Delete all the files in a directory:

- **Change** to the BAK directory (review, Exercise 14).

```
A:\BAK>
```

- **Type** DIR ↵

```
 Directory of A:\BAK

.            <DIR>      05-22-93   8:43p
..           <DIR>      05-22-93   8:43p
JONES    BAK          9 05-02-93   7:48p
ASTRO    GAM          9 05-02-93   8:48p
CHESS    GAM          9 05-02-93   8:48p
JEOPARDY GAM         12 05-02-93   8:49p
        6 file(s)          39 bytes
                     XXXXXX bytes free
```

- **Type** DEL *.* ↵
  *NOTE: The *.* filename pattern represents all the files in a directory.*
  This is a dangerous action so DOS warns you of what you are about to do.

```
All files in directory will be deleted!
Are you sure (Y/N)?
```

- **Type** Y ↵
- **Type** DIR ↵
  *There are no files in the directory—just the two directories that DOS uses to keep track of the directory structure, and which, by the way, DOS counts as **files**.*

```
 Volume in drive A is LEARNING
 Volume Serial Number is XXXX-XXXX
 Directory of A:\BAK

.            <DIR>      05-02-93   7:46p
..           <DIR>      05-02-93   7:46p
        2 file(s)          0 bytes
                     XXXXXX bytes free
```

- **Change** to the *root* directory (review, Exercise 14).

❽

- **Go on** to Exercise 23
  or **take** the disk out of drive A: and turn the computer off.

NOTE: When you decide to work in a directory, it may be less confusing to make that directory *current*. This is especially true when you are deleting all the files in a directory – typing the wrong directory name could be disastrous.

EXERCISE 23
UNDELETE

Restores files that have been deleted.
To increase the chance that UNDELETE will work, you should undelete a file *immediately*, or at least before *saving* new information on the disk.

OBJECTIVES:
- restore *one deleted file*
- restore a *group of deleted files*

- Terms and Notes -

NOTE: The results shown in step 2 are from DOS 5. DOS 6 has some slight differences in its report.

NOTE: To UNDELETE files in other directories, either:
- Change directories (CD) before issuing the command, or
- Type the **path** to the desired file before typing the filename or filename pattern.

NOTE: UNDELETE is a complex DOS feature with special programs that let you determine the level of deletion protection. This textbook covers only the basic, "automatic" protection level.

STEPS to

Restore deleted files

1 **Type** UNDELETE
2 **Press** Space
3 **Type** filename to restore.
4 **Press** ↵
DOS lists the file and prompts you to: `Undelete (Y/N)?`
5 **Type** Y
DOS prompts you to: `Please type the first character for (filename):`
6 **Type** the first letter of the filename.
7 **Press** ↵

1 • If necessary, **access** the DUPLICATE Learning Disk on drive A: and **change** to this common DOS prompt: `A:\>`

2 Restore one file:

• **Type** UNDELETE JONES.BAK ↵

your filename or filename pattern — *indicates that this "level" of deletion protection is not in use*

specifies the number of files that match your request and can be restored

prompt to undelete

```
Directory: A:\
File Specifications: JONES.BAK

    Deletion-tracking file not found.

    MS-DOS directory contains    1 deleted files.
    Of those,    1 files may be recovered.
Using the MS-DOS directory.

      ?ONES    BAK         9  5-02-93  7:48p  ...A  Undelete (Y/N)?
```

*IMPORTANT: UNDELETE is an **external command**. If you get a **Bad command or file name** message, C:\DOS is not in the PATH command of your AUTOEXEC.BAT file. However, you can probably complete this exercise if you type PATH C:\DOS ↵ and repeat step 2 (see Exercise 66, page 168).*

• **Type** Y

```
      Please type the first character for ?ONES.BAK:
```

• **Type** J

```
File successfully undeleted.
```

• **Type** DIR JONES.BAK ↵

```
JONES    BAK         9 05-02-93   7:48p
```

3 Restore a group of files:

• **Type** UNDELETE *.RPT ↵
In the partial DOS display below, you will see that DOS reports that there are "3 deleted files" and that "Of those, 3 files may be recovered."

```
    MS-DOS directory contains    3 deleted files.
    Of those,    3 files may be recovered.
Using the MS-DOS directory.
      ?OPEZ    RPT         9  5-02-93  8:19p  ...A  Undelete (Y/N)?
```

• **Type** Y

```
      Please type the first character for ?OPEZ    .RPT:
```

• **Type** L (first letter of filename)
DOS reports success and then prompts you to undelete the next file.

```
File successfully undeleted.
      ?MITH    RPT         9  5-02-93  8:20p  ...A  Undelete (Y/N)?
```

• **Type** Y

```
      Please type the first character for ?MITH    .RPT:
```

• **Type** S

```
File successfully undeleted.
      ?ONES    RPT         9  5-02-93  8:23p  ...A  Undelete (Y/N)?
```

• **Type** Y

```
      Please type the first character for ?ONES    .RPT:
```

• **Type** J

```
File successfully undeleted.
```

• **Type** DIR *.RPT ↵
DOS lists the three undeleted files.

4 • **Go on** to Exercise 24
or **take** the disk out of drive A: and turn the computer off.

Renaming files

To *rename* a file, first type the REN command, then the file's original filename, and finally, the file's new filename.

```
REN JELLO.DES GEL.DES
 ↑      ↑        ↑
command  original filename  new filename
```

Unlike copying a file, when you rename a file the original filename is removed. The *contents* of the original file are still intact—they simply have a *new* filename.

1 • If necessary, **access** the DUPLICATE Learning Disk on drive A: and **change** to this common DOS prompt: `A:\>`

2 **Rename a file in the current directory:**
(rename JELLO.DES to GEL.DES)

• **Type** `DIR *.DES` ↵

```
PUDDING  DES          11 05-02-93   8:19p
JELLO    DES           9 05-02-93   8:23p
       2 file(s)            20 bytes
                     XXXXXX bytes free
```

• **Type** `REN JELLO.DES GEL.DES` ↵
Drive A:'s light goes on, and DOS shows a new prompt on the screen.

• **Type** `DIR *.DES` ↵
You can see that JELLO.DES has been renamed GEL.DES.

```
PUDDING  DES          11 05-02-93   8:19p
GEL      DES           9 05-02-93   8:23p
       2 file(s)            20 bytes
                     XXXXXX bytes free
```

3 **Try to rename a file to a filename in the current directory:**
(rename GEL.DES to PUDDING.DES)

• **Type** `REN GEL.DES PUDDING.DES` ↵
DOS will not let you rename a file to a filename already in use in the current directory.

```
Duplicate file name or file not found
```

4 **Rename a group of files in the current directory:**
(rename files with .DES extensions to files with .YUM extensions)

NOTE: Since you listed the .DES files in the last step, you know what they are and do not need to check them with DIR again before you ***rename*** *them.*

• **Type** `REN *.DES *.YUM` ↵

• **Type** `DIR *.DES` ↵
Since you renamed all the .DES files, the original files are not there for DOS to find.

```
File not found
```

• **Type** `DIR *.YUM` ↵

```
PUDDING  YUM          11 05-02-93   8:19p
GEL      YUM           9 05-02-93   8:23p
       2 file(s)            20 bytes
                     XXXXXX bytes free
```

5 • **Go on** to Exercise 25
or **take** the disk out of drive A: and turn the computer off.

EXERCISE 24

REN (rename)

Changes a file's name.

OBJECTIVES:

- rename *one file* in the current directory
- rename a *group of files* in the current directory

- Terms and Notes -

NOTE: You can rename files in different drives by typing the **drive** after REN and before the original filename.
For example:

```
REN C: AUTO.BAT AUTO.OLD
```

You can also rename files in different directories by typing the **path** after REN and before the original filename.
For example:

```
REN \TEMP\AUTO.BAT AUTO.OLD
```

But you cannot rename files to different drives or directories.

STEPS to

Rename files
1 Type REN
2 Press Space
3 Type (original filename).
4 Press Space
5 Type (new filename).
6 Press ↵

EXERCISE 25

MOVE

FOR DOS 6 ONLY

Moves files* from one directory to another directory or *renames directories.

OBJECTIVES:

- move *one file* to a different directory
- move a *group of files* to a different directory
- rename a directory

- Terms and Notes -

WARNING: You can lose data when moving files. If the new location you are moving a file to has a file with the same name as the file you are moving, DOS will **overwrite the existing file with the file being moved** without warning you (except for DOS 6.2 – see note below).

DOS 6.2 NOTE: Unlike earlier versions of DOS, DOS 6.2 warns you and asks for your confirmation before overwriting a file with the same filename as the one you are copying.

STEPS to

Move files

1 **Type** MOVE
2 **Press** Space
3 **Type** filename or filename pattern of file(s) to move.
4 **Press** Space
5 **Type** path to new location.
6 **Press** ↵

Rename a directory

1 **Type** MOVE
2 **Press** Space
3 **Type** directory to rename.
4 **Press** Space
5 **Type** new directory name.
6 **Press** ↵

DOS 5 users skip Exercise 25

Moving Files

The MOVE command is new to DOS 6. MOVE has two jobs: 1) relocate files, and 2) change directory names.

To move a file, first type MOVE, then the name of the file to move, and finally, the new location.

```
MOVE   LOPEZ.MEM   \PROGRAMS\DATA
  ↑        ↑              ↑
command  filename     new location
```

To rename a directory, first type MOVE, then type the directory to rename, and finally, type the new directory name.

```
MOVE   \PROGRAMS   \PROGS
  ↑        ↑         ↑
command  directory  new directory name
```

NOTE: Earlier versions of DOS cannot rename directories, and they "move" files by using COPY (to place files in other directories) and then DEL (to delete the original files).

❶ • If necessary, **access** the DUPLICATE Learning Disk on drive A: and **change** to this common DOS prompt: `A:\>`

❷ **Move one file:**
(move LOPEZ.MEM to the DATA directory)

• **Type** `DIR *.MEM` ↵
(to confirm that the original file is there)

```
SMITH    MEM          9 05-02-93   8:20p
LOPEZ    MEM          9 05-02-93   8:21p
JONES    MEM          9 05-02-93   8:22p
       3 file(s)         27 bytes
                      XXXXXX bytes free
```

• **Type** `MOVE LOPEZ.MEM \PROGRAMS\DATA` ↵

*IMPORTANT: MOVE is an **external command**. If you get a **Bad command or file name** message, DOS is not in the PATH command of your AUTOEXEC.BAT file. However, you can probably complete this exercise if you type PATH C:\DOS ↵ and repeat step 2 (see Exercise 66, page 168).*

```
a:\lopez.mem => \programs\data\lopez.mem [ok]
```

• **Type** `DIR \PROGRAMS\DATA\*.MEM` ↵
(to check DATA directory for the new file)

```
LOPEZ    MEM          9 05-02-93   8:21p
       1 file(s)          9 bytes
                      XXXXXX bytes free
```

• **Type** `DIR *.MEM` ↵
(to check the original file—LOPEZ.MEM is no longer in the directory)

```
SMITH    MEM          9 05-02-93   8:20p
JONES    MEM          9 05-02-93   8:22p
       2 file(s)         18 bytes
                      XXXXXX bytes free
```

❸ **Move a group of files:**
(move all the MEMO files to the DATA directory)

• **Type** `DIR MEMO?` ↵
(to confirm that the original files are there)

```
MEMO3                5 05-02-93   8:21p
MEMO1                5 05-02-93   8:24p
MEMO2                5 05-02-93   8:24p
       3 file(s)         15 bytes
                      XXXXXX bytes free
```

Exercise 25 continued...

- **Type** MOVE MEMO? \PROGRAMS\DATA ↵

```
a:\memo3 => a:\programs\data\memo3 [ok]
a:\memo1 => a:\programs\data\memo1 [ok]
a:\memo2 => a:\programs\data\memo2 [ok]
```

- **Type** DIR \PROGRAMS\DATA\MEMO? ↵
  (to check the DATA directory for the new files)

```
MEMO3                5 05-02-93   8:21p
MEMO1                5 05-02-93   8:24p
MEMO2                5 05-02-93   8:24p
        3 file(s)          15 bytes
                       XXXXXX bytes free
```

- **Type** DIR MEMO? ↵
  (to check the original files—they are gone)

```
File not found
```

❹ Rename a directory:

(rename PROGRAMS to PROGS to shorten the name)

NOTE: Renaming a directory does not change the files and other directories within the original directory.

- **Type** TREE ↵

```
Directory PATH listing for Volume LEARNING
Volume Serial Number is XXXX-XXXX
 A:.
   ├──GAMES
   ├──FOOD
   │     ├──VEGGIES
   │     └──GOODIES
   ├──PROGRAMS     ← original directory name
   │     └──DATA
   └──BAK
```

- **Type** MOVE \PROGRAMS \PROGS ↵

```
a:\programs => a:\progs [ok]
```

- **Type** TREE ↵

```
Directory PATH listing for Volume LEARNING
Volume Serial Number is XXXX-XXXX
 A:.
   ├──GAMES
   ├──FOOD
   │     ├──VEGGIES
   │     └──GOODIES
   ├──PROGS        ← new directory name
   │     └──DATA
   └──BAK
```

❺ List files within the renamed directory branch:

(list MEMO files in the DATA directory)

- **Type** DIR \PROGS\DATA\MEMO? ↵

DOS lists the same files that were in the PROGRAMS directory.

```
MEMO3                5 05-02-93   8:21p
MEMO1                5 05-02-93   8:24p
MEMO2                5 05-02-93   8:24p
        3 file(s)          15 bytes
                       XXXXXX bytes free
```

❻ Print a list of the root directory:

- **Type** DIR>PRN ↵
- **Force** the printer to eject the paper.
  NOTE: The result is shown in Appendix H.

❼

- **Go on** to Exercise 26
  or **take** the disk out of drive A: and turn the computer off.

EXERCISE 26

TYPE

Displays the contents of a file.

OBJECTIVES:

- view the contents of an ASCII file
- view the contents of a program file
- view the contents of a batch file on drive C:
- print the contents of some ASCII files

- Terms and Notes -

ASCII file
A file saved in ASCII format contains only text and is free of formatting codes. Also called a *text* file.

program file
A file that contains executable codes. These codes will appear as strange-looking symbols when viewed using the TYPE command.

batch file
A file that contains a list of DOS commands that DOS carries out as a set. Batch files always have a .BAT filename extension.

STEPS to

View the contents of a file

1 **Type** `TYPE`
2 **Press** Space
3 **Type** the filename of the file to view (including the path, if the file is in a different directory).
4 **Press** ↵

Print the contents of a file

1 **Type** `TYPE`
2 **Press** Space
3 **Type** the filename of the file to view (preceded by the path, if the file is in a different directory).
4 **Type** `>PRN`
5 **Press** ↵
6 **Force** the printer to eject the paper.

1 • If necessary, **access** the DUPLICATE Learning Disk on drive A: and **change** to this common DOS prompt: `A:\>`

2 View the contents of an ASCII file:

- **Type** `TYPE HELLO` ↵

```
HELLO, HELLO, HELLO, hello, hello, hello.
How are you this fine day?
It is a fine day isn't it?
```

- **Type** `TYPE NOT` ↵

```
Having a wonderful time learning about DOS's TYPE command?
```

3 View the contents of a program file:

NOTE: Since all the .EXE files are in a different directory, we will use a ***path*** *with the TYPE command. Notice how the* ***path*** *to a file almost seems to become part of the filename as it leads DOS directly to the file.*

- DOS 6 users: **Type** `TYPE PROGS\WP.EXE` ↵
  DOS 5 users: **Type** `TYPE PROGRAMS\WP.EXE` ↵
  A lot of beeping is heard and strange symbols appear on the screen. As you can tell, using the TYPE command with program files is not useful to you.

4 View a file in a different directory:

- **Type** `TYPE FOOD\GOODIES\PIE.DES` ↵

```
PIE.DES
```

NOTE: Most of the files on the Learning Disk are "dummy" files, meaning that they do not have anything of importance in them but are for your practice in manipulating files. The files were created in ASCII (text) format, and most files contain just their own name (as the above result shows).

5 • **Use** the TYPE command to view the contents of other files on the disk as you desire.

6 View the contents of a batch file on drive c:

- **Type** `TYPE C:\AUTOEXEC.BAT` ↵
  DOS displays the contents of a very important ***batch*** *file. AUTOEXEC.BAT and* ***batch*** *files will be covered in Lesson 7.*

7 Redirect the results of the TYPE command to the printer:

- **Make** sure the printer is ready to receive data.
- **Type** `TYPE HELLO >PRN` ↵
- **Type** `TYPE NOT >PRN` ↵
- **Type** `TYPE FOOD\GOODIES\CAKE.DES >PRN` ↵
- **Force** the printer to eject the paper.

```
HELLO, HELLO, HELLO, hello, hello, hello.
How are you this fine day?
It is a fine day isn't it?
Having a wonderful time learning about DOS's TYPE command?
CAKE.DES
```

8 • **Go on** to Exercise 27
or **take** the disk out of drive A: and turn the computer off.

Formatting a disk

When you format a disk, DOS sets up a *File Allocation Table* (FAT) and creates a *root* directory. DOS uses the FAT to track the location of files on your disk and the *root* directory to store the filename, extension, size, and creation date and time of all files on your disk.

Unless you tell it otherwise, *most* floppy disk drives will try to format your disk to the maximum capacity of the drive. This can cause problems on disks that do not have the required *density*. However, you can format a disk to the following standard sizes by using the /F switch with the appropriate disk size: 360K or 720K.

To format a *double density (DD)* disk in a *high density (HD)* disk drive, type FORMAT, then type the *drive* that holds the disk, and finally, type the /F switch and the desired *format size*. For example, this command tells DOS the size of the disk (360K) it is to format:

```
FORMAT A: /F:360
  ↑      ↑  ↑  ↑
command drive switch size
```

To format a *high density* disk in a *high density* disk drive A:, type:

```
FORMAT  A:
  ↑     ↑
command drive
```

❶ • If necessary, **access** the DUPLICATE Learning Disk on drive A: and **change** to this common DOS prompt: `A:\>`

❷ Format your DUPLICATE Learning Disk:

NOTE: Yes, you are going to erase everything on the DUPLICATE Learning Disk.

- 5¼" DD disk: **Type** `FORMAT A:` ↵
  OR
  3½" DD disk: **Type** `FORMAT A:` ↵

  DOS prompts you to put the disk you want to format into drive A:

```
Insert new diskette for drive A:
 and press ENTER when ready...
```

  IMPORTANT: *FORMAT is an **external command**. If you get a **Bad command or file name** message, DOS is not in the PATH command of your AUTOEXEC.BAT file. However, you can probably complete this exercise if you type PATH C:\DOS ↵ and repeat step 2 (see Exercise 66, page 168).*

- **Put** the *duplicate Learning Disk* in drive A:, and **make sure** that it is not *write-protected*.

- **Press** ↵

  DOS displays the first two lines on the illustration below and then shows a "running" report as the formatting progresses. After a while DOS reports "Format complete" and prompts you for a Volume label.

```
Checking existing disk format.
Saving UNFORMAT information.
Verifying 360K  (or 720K)
Format complete.

Volume label (11 characters, ENTER for none)?
```

Exercise 27 continued...

EXERCISE 27
FORMAT

The DOS command that prepares a disk for use by the computer.

OBJECTIVES:

- distinguish between formatting a *double density* disk and a *high density* disk in a *high density* disk drive
- format a *double density* disk in a *high density* disk drive
- format the DUPLICATE Learning Disk

- Terms and Notes -

WARNING: When you use FORMAT, any existing data on the disk will be destroyed.

NOTE: DOS versions 5 and 6 have an UNFORMAT command that may be able to restore a newly formatted disk.

WARNING: DO NOT PROCEED WITH FORMAT if you get this message:

```
WARNING, ALL DATA ON
NON-REMOVABLE DISK
DRIVE C: WILL BE LOST!
Proceed with Format (Y/N)?
```

Type N and press ↵

FORMAT switches

/F:size	**format** size (160, 180, 320, 360, 720, 1.2, 1.44, 2.88)
/S	creates a **system** (bootable) disk
/Q	formats **quickly**, but does not scan for bad areas on disk
/U	formats **unconditionally**, destroying data so that it cannot be unformatted, and scans disk for bad areas
/V	used to enter a **volume** label of up to 11 characters

STEPS to

Steps to are on the next page.

- **Type** LEARNING ↵

NOTE: You can press ↵ if you do not want to give the disk a volume label.

*DOS reports the **total disk capacity** (bytes of total disk space) and the **bytes available**. Finally, DOS prompts you to "Format another (Y/N)?"*

```
    362496 bytes total disk space
    362496 bytes available on disk

      1024 bytes in each allocation unit.
       354 allocation units available on disk.

Volume Serial Number is XXXX-XXXX

 Format another (Y/N)?
```

***WARNING:** If DOS reports some **bytes in bad sectors**, you should not use the disk because this disk will be used with the DISKCOPY command. DISKCOPY copies the **source** disk **exactly**, that is, DOS puts information in exactly the same location on the **destination** disk as it is on the **source** disk. If the **destination** disk has **bad sectors**, the information that should go in those sectors is lost, and the DISKCOPY process usually fails. So, while disks with **bad sectors** can be used for some things, they should not be used with the DISKCOPY command nor to store important files.*

- **Type** N ↵

```
A:\>
```

❸ • **Go on** to Exercise 28
or **take** the disk out of drive A: and turn the computer off.

STEPS to

Format disks in an HD disk drive

1 Type FORMAT
2 Press Space
3 Type the disk drive letter.
4 Press :
IF the disk is *double density (DD)*:
- **Type** /F:
- **Type** the disk *size.*

5 Press ↵
6 Place your nonwrite-protected disk in the disk drive named above (step 3).
7 Press ↵
After a little time DOS reports "format complete," and prompts you for a Volume label.
8 Type a volume label
OR
Press ↵ (for no label).
DOS prompts: "Format another (Y/N)?"
9 Type Y ↵ and repeat steps 6–8 (or steps 4–8 if the disk is DD).
OR
Type N ↵

The COMMANDS to perform each step are listed in Appendix I.
Try to complete the exercise without looking at the Appendix for help.

NOTE: When doing the exercise steps that follow, use the DIR command to list files before and after copying to get a sense of the movement of your files.

1. **Use** DISKCOPY to copy the contents of the Learning Disk to the "Duplicate" Learning Disk. Use the *verify switch* and make sure that the original Learning Disk is *write-protected.*

2. **Access** the newly copied DUPLICATE Learning Disk on drive A: and **change** to this common DOS prompt: `A:\>`

3. **Copy** the file LETTER1 to the *current* directory and rename it LETTER4.

4. **Copy** the group of files with the extension .MEM to the *current* directory and rename them to files with the extension .BAK.

5. **Copy** LETTER4 to the DATA directory (a subdirectory of PROGRAMS).

6. **Copy** the group of files with the extension .VEG to the VEGGIES directory.

7. **Copy** the group of files with the extension .BAK to the BAK directory.

8. **Copy** the group of files that end with .VEG to the BAK directory and rename them to files with the extension .BAK.

9. **Change** to the GAMES directory.

10. **Copy** *all* of the files in the GAMES directory to the BAK directory.

11. **Change** to the *root* directory.

12. **Copy** the group of files in the current directory that begin with P to the BAK directory.

13. **Print** a list of the files in the BAK directory.
Force the printer to eject the paper.

```
 Volume in drive A is LEARNING
 Volume Serial Number is XXXX-XXXX
 Directory of A:\BAK

.            <DIR>      05-22-93    8:43p
..           <DIR>      05-22-93    8:43p
SMITH    BAK             9 05-02-93    8:20p
LOPEZ    BAK             9 05-02-93    8:19p
JONES    BAK             9 05-02-93    8:23p
CORN     BAK             8 05-02-93    8:17p
RADISH   BAK            10 05-02-93    8:17p
POTATOES BAK            12 05-02-93    8:18p
ASTRO    GAM             9 05-02-93    8:48p
CHESS    GAM             9 05-02-93    8:48p
JEOPARDY GAM            12 05-02-93    8:49p
POTATOES VEG            12 05-02-93    8:18p
PUDDING  DES            11 05-02-93    8:19p
       13 file(s)            110 bytes
                         XXXXXX bytes free
```

14. **Go on** to Exercise 29
or **take** the disk out of drive A: and turn the computer off.

EXERCISE 28

Practice

LESSON THREE
Frequently Used DOS Commands

OBJECTIVE:

- review the following tasks from the exercises in Lesson Three:

  DISKCOPY
  COPY a file to the current directory
  COPY a group of files to the current directory
  COPY a file to a different directory
  COPY a group of files to a different directory
  COPY a group of files to a different directory and rename them
  COPY all the files in a directory to a different directory

Use the directory structure below to help you do the exercise.

EXERCISE 29

Practice

LESSON THREE
Frequently Used DOS Commands

OBJECTIVE:

- review the following tasks from the exercises in Lesson Three:

  DELete a file in the current directory
  DELete a file in a different directory
  DELete a group of files from the current directory
  DELete a group of files from a different directory
  DELete all the files in a directory

  UNDELete a file
  UNDELete a group of files

  REName a file
  REName a group of files

  MOVE a file DOS 6 ONLY
  MOVE a group of files DOS 6 ONLY
  REName a directory DOS 6 ONLY

  TYPE
  view the contents of an ASCII file
  view the contents of a program file
  view the contents of a batch file
  use TYPE and the redirect code to print some ASCII files

  FORMAT the Duplicate disk
  DISKCOPY the original Learning Disk to the Duplicate Learning Disk

Use the directory structure below to help you do the exercise.

```
A:.
   GAMES
   FOOD
      VEGGIES
      GOODIES
   PROGRAMS
      DATA
   BAK
```

The COMMANDS to perform each step are listed in Appendix I. Try to complete the exercise without looking at the Appendix for help.

NOTE: When doing the exercise steps that follow, use the DIR command to list files before and after copying to get a sense of the movement of your files.

1. If necessary, **access** the DUPLICATE Learning Disk on drive A: and **change** to this common DOS prompt: `A:\>`
2. **Delete** OLDMAID.GAM from the current (root) directory.
3. **Delete** the group of files ending with .BAK from the current directory.
4. **Delete** JEOPARDY.GAM from the GAMES directory.
5. **Delete** the group of files ending with .GAM from the BAK directory.
6. **Change** to the GOODIES directory.
7. **Delete** *all* the files from the GOODIES directory.
8. **Change** back to the *root* directory.
9. **Rename** LOPEZ.RPT to LOPEZRPT.BAK (in the *root* directory).
10. **Rename** the group of files ending with .GAM to files ending with .FUN (in the *root* directory).
11. DOS 6 ONLY. **Move** LOPEZRPT.BAK from the *root* directory to the BAK directory.
    DOS 5 ONLY. **Copy** LOPEZRPT.BAK to the BAK directory and then **delete** LOPEZRPT.BAK from the current (root) directory.
12. DOS 6 ONLY. **Move** the group of files ending with .FUN from the *root* directory to the GAMES directory.
    DOS 5 ONLY. **Copy** the group of files ending with .FUN to the GAMES directory and then **delete** the group of files ending with .FUN from the current (root) directory.
13. DOS 6 ONLY. **Use** MOVE to **rename** the GAMES directory to FUN.
14. DOS 6 ONLY. **Use** TREE to view the directory structure.

```
A:.
   FUN          ← changed directory
   FOOD
      VEGGIES
      GOODIES
   PROGRAMS
      DATA
   BAK
```

15. **View** the contents of the ASCII file HURRAH.

```
HURRAH!  This is the last TYPE command in this lesson.
```

16. **View** the contents of the program file DB.EXE (located in the PROGRAMS directory). It beeps for a *long* time.

Exercise 29 continued...

17 **View** the contents of the batch file SHOWME.BAT (located in the PROGRAMS directory).

```
ECHO OFF
CLS
TYPE OPENING.DAT
PAUSE
CLS
TYPE CD.DAT
PAUSE
CLS
TYPE CLS.DAT
PAUSE
CLS
```

18 **Print** the contents of the ASCII file HURRAH.
Force the printer to eject the paper.

19 **Use** DIR with the /S switch and the redirect code (>) to print the contents of your entire disk. The /S switch tells DOS to list files in subdirectories as well as the files in the current directory (see Exercise 34).

- **Type** `DIR/S >PRN` ↵
  The first page (or two) will automatically eject from the printer.
- **Force** the last page to eject.

See the results of step 19 at the end of this exercise.

20 **Format** the Duplicate Learning Disk.

21 **Copy** the entire contents of the "original" Learning Disk to the "duplicate" Learning Disk. Use the *verify switch* and make sure that the original Learning Disk is *write-protected.*

22 **Go on** to Worksheet 11.
If desired, **take** the disk out of drive A: and turn the computer off.

Results for Step 19. Page break may be different.

```
 Volume in drive A is LEARNING
 Volume Serial Number is XXXX-XXXX

Directory of A:\

FUN            <DIR>      05-02-93   7:46p (GAMES for DOS 5)
FOOD           <DIR>      05-02-93   7:46p
PROGRAMS       <DIR>      05-22-93   8:41p
JONES     LET          9 05-02-93   7:48p
BAK            <DIR>      05-22-93   8:43p
SMITH     LET          9 05-02-93   8:13p
LOPEZ     LET          9 05-02-93   8:13p
LETTER1                7 05-02-93   8:15p
REPORT3                7 05-02-93   8:16p
LETTER2                7 05-02-93   8:16p
CORN      VEG          8 05-02-93   8:17p
RADISH    VEG         10 05-02-93   8:17p
POTATOES  VEG         12 05-02-93   8:18p
PUDDING   DES         11 05-02-93   8:19p
REPORT1                7 05-02-93   8:20p
SMITH     RPT          9 05-02-93   8:20p
SMITH     MEM          9 05-02-93   8:20p
MEMO3                  5 05-02-93   8:21p
LOPEZ     MEM          9 05-02-93   8:21p
LETTER3                7 05-02-93   8:22p
JONES     MEM          9 05-02-93   8:22p
JONES     RPT          9 05-02-93   8:23p
JELLO     DES          9 05-02-93   8:23p
LETTER4                7 05-02-93   8:15p
MEMO1                  5 05-02-93   8:24p
MEMO2                  5 05-02-93   8:24p
REPORT2                7 05-02-93   8:25p
HELLO                 99 05-25-93   9:36p
HURRAH                54 05-02-93   8:40p
NOT                   60 05-25-93   9:37p
       30 file(s)          399 bytes
```

(Results continue on next page.)

Exercise 29 continued...

Results for step 19 (continued)

```
Directory of A:\BAK

.            <DIR>      05-22-93   8:43p
..           <DIR>      05-22-93   8:43p
SMITH    BAK             9 05-02-93   8:20p
LOPEZ    BAK             9 05-02-93   8:19p
JONES    BAK             9 05-02-93   8:23p
CORN     BAK             8 05-02-93   8:17p
RADISH   BAK            10 05-02-93   8:17p
POTATOES BAK            12 05-02-93   8:18p
LOPEZRPT BAK             9 05-02-93   8:19p
POTATOES VEG            12 05-02-93   8:18p
PUDDING  DES            11 05-02-93   8:19p
       11 file(s)         89 bytes

Directory of A:\FOOD

.            <DIR>      05-02-93   7:46p
..           <DIR>      05-02-93   7:46p
VEGGIES      <DIR>      05-02-93   8:27p
GOODIES      <DIR>      05-02-93   8:28p
       4 file(s)          0 bytes

Directory of A:\FOOD\GOODIES

.            <DIR>      05-02-93   8:28p
..           <DIR>      05-02-93   8:28p
       2 file(s)          0 bytes

Directory of A:\FOOD\VEGGIES

.            <DIR>      05-02-93   8:27p
..           <DIR>      05-02-93   8:27p
CABBAGE  VEG            11 05-02-93   8:47p
CARROTS  VEG            11 05-02-93   8:47p
KALE     VEG             8 05-02-93   8:47p
LETTUCE  VEG            11 05-02-93   8:47p
CELERY   VEG            10 05-02-93   8:48p
CORN     VEG             8 05-02-93   8:17p
RADISH   VEG            10 05-02-93   8:17p
POTATOES VEG            12 05-02-93   8:18p
      10 file(s)         81 bytes

Directory of A:\FUN  (or GAMES, if you are using DOS 5)

.            <DIR>      05-02-93   7:46p
..           <DIR>      05-02-93   7:46p
ASTRO    GAM             9 05-02-93   8:48p
CHESS    GAM             9 05-02-93   8:48p
CLUE     FUN             8 05-02-93   8:17p
TRIVIA   FUN            10 05-02-93   8:21p
       6 file(s)          36 bytes

Directory of A:\PROGRAMS

.            <DIR>      05-22-93   8:41p
..           <DIR>      05-22-93   8:41p
CLS      DAT           290 04-22-93   4:05p
OPENING  DAT           319 04-22-93   4:05p
CD       DAT           479 04-22-93   3:57p
SHOWME   BAT           139 04-22-93   3:59p
DB       EXE         31458 04-22-93   3:21p
SS       EXE         31374 04-22-93   3:06p
WP       EXE         31426 04-22-93   3:10p
DATA         <DIR>      05-22-93   8:43p
      10 file(s)      95485 bytes

Directory of A:\PROGRAMS\DATA

.            <DIR>      05-22-93   8:43p
..           <DIR>      05-22-93   8:43p
MEMBER   DB              9 05-25-93   9:28p
CLUB     DB              7 05-25-93   9:29p
MUSIC    DB              8 05-25-93   9:29p
REPORT   DOC            10 05-25-93   9:30p
SCRIPT   DOC            10 05-25-93   9:30p
PAYROLL  WK             10 05-25-93   9:31p
SALES    WK              8 05-25-93   9:31p
AGENDA   DOC            10 05-25-93   9:32p
GRADES   WK              9 05-25-93   9:32p
LETTER4                  7 05-02-93   8:15p
      12 file(s)         88 bytes

Total files listed:
      85 file(s)      96178 bytes
                     XXXXXX bytes free
```

WORKSHEET 11

NAME _____

EXERCISES 18, 19, 20, and 21

DIRECTIONS: Use the following terms to fill in the blanks below.

COPY	DISKCOPY	filename pattern	COPY files to different directories
wildcards	write-protect	write-protect tab	COPY a group of files to the same directory
target disk	overwrite a file	verify switch (/V)	COPY a file to the same directory
source disk			

1. Symbols that represent different characters or groups of characters in a DOS command. 1. _____

2. A combination of *characters* and *wildcards* that represents a group of files. 2. _____

3. The DOS command that duplicates file(s). 3. _____

4. When you COPY files *this way* you have a choice of either keeping the original filename for the duplicate file(s) or renaming the duplicate file(s). 4. _____

5. When you COPY *this way* you *must* give the duplicate file a new filename. 5. _____

6. When you COPY *this way* you must give the duplicate files new filenames, and represent the files by using a combination of *wildcards* and *filename characters* (called a *filename pattern*). 6. _____

7. A small self-adhesive tab that often comes packaged with disk labels and is used to cover the write-enable notch on a 5¼" floppy disk. 7. _____

8. To replace the contents of one file with the contents of another file. 8. _____

9. The disk to copy <u>from</u> when doing a DISKCOPY. 9. _____

10. To use a procedure that will protect a disk from being changed in any way while still allowing you to read the information on the disk. 10. _____

11. The disk to copy <u>to</u> when doing a DISKCOPY. 11. _____

12. An optional addition to the DISKCOPY command that tells DOS to compare the source and target disks during the copy. 12. _____

13. The DOS command that copies the contents of a floppy disk (the *source* disk) onto another floppy disk (the *target* disk). 13. _____

(This page may be copied)

WORKSHEET 12

EXERCISES 22, 23, 24, 25, 26, and 27

NAME _____

DIRECTIONS: Use the following terms to fill in the blanks below.

TYPE	FORMAT	UNDELETE
MOVE	ASCII file	DEL (delete)
batch file	program file	REN (rename)

1. To prepare a disk for use by the computer and create a root directory. 1. _____

2. The DOS command that lets you view the contents of a file. 2. _____

3. The DOS command that recovers files that have been deleted. 3. _____

4. The DOS command that lets you change a file's name. 4. _____

5. A file that contains executable code that appears as strange-looking symbols when viewed using the TYPE command. 5. _____

6. A file that contains a list of DOS commands that DOS carries out as a set. These files use a .BAT filename extension. 6. _____

7. A file that contains only text and is free of formatting codes. Also called a *text* file. 7. _____

8. The DOS command that removes files from a disk. 8. _____

9. The DOS command that moves files from one directory to another directory or renames directories. This feature works only with DOS 6. 9. _____

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WORKSHEET 13

NAME _____

LESSON THREE, Questions and Commands

1. Can you use DISKCOPY to copy the contents of the hard disk? 1. _____

2. When you use DISKCOPY, must the *source* and *target* disks be the same size and density? 2. _____

3. How can you protect the *source* (original) disk from overwriting its files if you accidentally switch the *source* disk and the *target* disk? 3. _____

4. How do you *write-protect* a 5¼" disk? 4. _____

5. How do you *write-protect* a 3½" disk? 5. _____

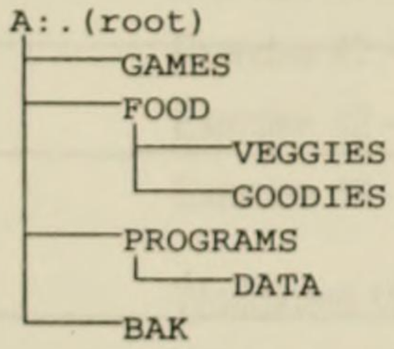
6. What can you add to the DISKCOPY command to tell DOS to compare the source and target disks during the copy? 6. _____

7. What DOS command do you use to give you a sense of the files you have and how they move when using COPY, DEL, REN, and MOVE? 7. _____

8. How can you accidentally lose information when using COPY and MOVE? 8. _____

9. What can you add to the FORMAT command to tell DOS to format a disk to a lower density in a high density disk drive? 9. _____

Use this *directory structure* when necessary to complete the commands below.



WHAT IS THE DOS COMMAND TO:
Assume that the *current* directory is the *root* directory.

10. Diskcopy from drive A: to drive A: and verify the copy. 10. _____

11. Copy a file named COOKIES.DES to COOKIES.FUN in the same directory. 11. _____

12. Copy the group of files ending with .LET to files ending with .BAK in the same directory. 12. _____

13. Copy a file named COOKIES.DES from the current directory to the GOODIES directory. 13. _____

14. Copy the group of files that end with .MEM from the current directory to the DATA directory. 14. _____

15. Copy the group of files that end with .MEM from the current directory to the BAK directory, and rename them to files that end with .BAK. 15. _____

16. Copy a file named RADISH.VEG from the current directory to the VEGGIES directory and rename it to RADISH.RAD. 16. _____

17. Copy all the files in the current directory to the BAK directory. 17. _____

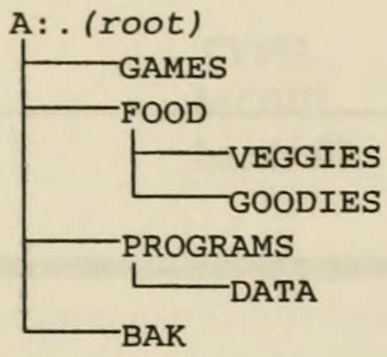
(This page may be copied)

WORKSHEET 14

NAME _____

LESSON THREE, Commands

Use this *directory structure* when necessary to complete the commands below.



WHAT IS THE COMMAND TO:

Assume that the *current* directory is the *root* directory.

1. Delete a file named CABBAGE.VEG from the current directory. 1. _____
2. Delete the group of files ending with .RPT from the current directory. 2. _____
3. Delete all the files in the current directory. 3. _____
4. Delete a file named CARROTS.VEG from the VEGGIES directory while the root directory is current. 4. _____
5. Recover a file named JONES.LET from the current directory. 5. _____
6. Recover the group of files that end with .BAK from the current directory. 6. _____
7. Rename a file named SMITH.LET to a file named SMITHLET.BAK. 7. _____
8. Rename the group of files that end with .RPT to files that end with .REP. 8. _____
9. Move a file named FRUIT.DES from the current directory to the GOODIES directory. 9. _____
10. Move a group of files that begin with M from the current directory to the BAK directory. 10. _____
11. Rename a directory named BAK to a directory named BAKUP. 11. _____
12. View the contents of a file named HELLO in the current directory. 12. _____
13. View the contents of a file named CHANGE.BAT in the current directory. 13. _____
14. View the contents of a file named SS.EXE in a directory named PROGRAMS. 14. _____
15. View the contents of the AUTOEXEC.BAT file in the root directory on drive C: while drive A: is current. 15. _____
16. Format a *double density* 5¼" (360K) disk in a *high density* disk drive A:. 16. _____
17. Format a *double density* 3½" (720K) disk in a *high density* disk drive A:. 17. _____
18. Format a *high density* disk in a *high density* disk drive A: 18. _____

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Lesson Four
Other Useful DOS Commands

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TOPIC 11
Command parts

Command name, parameters, switches, spaces, slashes, backslashes, and colons.

OBJECTIVES:

- identify the three main command parts
- identify four small command parts
- identify commands that use only the command name
- identify commands that require parameters
- identify commands that may include optional parameters and switches
- identify commands that require two sets of parameters

three main command parts
Command name, parameters, and switches.

four small command parts
Space, colon, slash, and backslash.

DOS command
Instructions that tell DOS to perform a task, including:
the command name,
parameters, and
switches.

command name
The *command name* states the action you want DOS to carry out.

parameters
Parameters define the object you want DOS to act on, usually:
a disk drive,
a directory,
a file or group of files, or
a combination of the above.

switches
Modify the way a command performs a task.

ABOUT SPACES — Often DOS does not require a space to separate the main DOS parts if there is another symbol that acts as a signal to do something specific. For example:
a slash (to introduce a switch) or
a backslash (to start a path).

DOS can understand:

this	`DIR \FOOD\VEGGIES`
or this	`DIR\FOOD\VEGGIES`
or this	`DIR FOOD\VEGGIES`
but not this	`DIRFOOD\VEGGIES`

The three main command parts

DOS commands have three main parts, but not all commands require every part:

command name (names the action you want DOS to carry out)
parameters (define the object you want DOS to act on)
- the disk drive
- the path
- the filename

switches (modify the action, i.e., the command name)

The **command name** is always required.
Parameters are sometimes required and sometimes optional.
Switches are usually optional.

always required ↓ — *sometimes required/sometimes optional* ↓ — *usually optional* ↓

```
DIR   A:\FOOD\GOODIES\*.DES   /O
```

↑ ***command name*** *(the action you want DOS to carry out)*
↑ ***parameters*** *(define the object you want DOS to act on)*
↑ ***switches*** *(modify the action)*

Four small, but important, command parts

The following characters are part of the system that was developed to help DOS carry out your commands accurately.

spaces

Spaces often **separate** the *main command parts.*
- Spaces *must* be used when DOS would be confused without them.
- Spaces *may* also be used when *you* would be confused without them.

colons
- A *colon* always follows a *drive letter.*
- A *colon* always precedes a switch *option.*

slash (/)
- A *slash* usually precedes a switch.

backslash (\)

The *backslash* is used three ways in the *path.*
- A *backslash* which starts a *path* represents the *root* directory.
- *Backslashes* separate *multiple directories* within a path.
- A *backslash* separates the *last* directory and the *filename* in a path.

This command contains all eight variations of the four *small command parts* described above:

(DOS needs) ***space*** ↓ — *(represents root directory)* ***backslash*** ↓ — *(separates directory and filename)* ***backslash*** ↓ — *(precedes a switch)* ***slash*** ↓

```
DIR  A:\FOOD\GOODIES\*.DES  /O:D
```

↑ ***colon*** *(follows the drive letter)*
↑ ***backslash*** *(separates directories)*
↑ ***space*** *(not needed but may help you visually)*
↑ ***colon*** *(precedes the switch option)*

Topic 11 continued...

Some commands use just the command name

CLS (clear screen) and **VER** (display the DOS version) are two commands that use the *command name* only. DIR (directory) is a command that can either use just the *command name*, or use the *command name* with *parameters* and/or *switches*.

Some commands require parameters

Some commands need to tell DOS what object to act on, for example:

DEL	needs at least a filename -	`DEL CORN.VEG`
FORMAT	needs a drive -	`FORMAT B:`
TYPE	needs at least a filename -	`TYPE AUTOEXEC.BAT`

Some commands may include optional parameters and switches

DIR and **TREE** are two commands that can be used either alone or with *parameters* and/or *switches*, for example:

DIR with parameters—tells DOS what to act on, i.e., what directory and/or filenames to list.

```
DIR *.DOC
DIR \FOOD\VEGGIES
DIR A:\FOOD\VEGGIES\*.VEG
```

DIR with switches—modifies the way DIR works, for example, to pause after every screenful, to list files wide, or to list files in order *and* pause.

```
DIR /P
DIR /W
DIR /O/P
```

DIR with parameters and switches—tells DOS what to act on and modifies the way DIR works.

```
DIR C:\DOS /P
DIR \FOOD\VEGGIES /O
DIR *.COM /W
```

Some commands require two sets of parameters

Commands that need two sets of parameters usually need:
a **source parameter** to tell DOS what object to act on and
a **destination parameter** to tell DOS what to do with the object, for example:

RENAME

- needs a **source** filename and a **destination** filename
  `REN COOKIES.DES COOKY.YUM`
  (tells DOS to act on the object (a file), COOKIES.DES, and to rename the object (a file) COOKY.YUM)

COPY

- needs a **source** filename and a **destination** filename:
  `COPY COOKIES.DES COOKY.YUM`
  (tells DOS to act on the object (a file), COOKIES.DES, and to copy the object to a file named COOKY.YUM in the same directory)
- or it needs a **source** filename and a **destination** location:
  `COPY COOKIES.DES \FOOD\GOODIES`
  (tells DOS to act on a file, COOKIE.DES, and to copy the object to a directory named GOODIES)
- or it needs a **source** location and filename, and a **destination** location and filename:
  `COPY \FOOD\VEGGIES\*.VEG \BAKUP\*.BAK`
  (tells DOS to act on the group of files *.VEG, located in the VEGGIES directory, and to copy the group of files to the BAKUP directory and rename the group of files *.BAK)
- or it needs some other combination of the parameters shown above

source parameter
Defines the location of data to be transferred to a specified *destination*. A *source parameter* can consist of:
a drive letter and colon,
a path,
a file or group of files, or
a combination of the above.

destination parameter
Defines the location to which the data specified by the *source parameter* is to be transferred. A *destination parameter* can consist of:
a drive letter and colon,
a path,
a file or group of files, or
a combination of the above.

NOTE: The source parameter always comes before the destination parameter.

EXERCISE 30

DOS 6 only

FASTHELP

Provides *fast* information about DOS commands.

OBJECTIVES:

- display a list of the DOS commands and their definitions
- print the list of the DOS commands and their definitions
- use the FASTHELP command to get information about a DOS command

– Terms and Notes –

NOTE: FASTHELP in DOS version 6 is the same as HELP in DOS version 5.

IMPORTANT: FASTHELP is an **external command**. If you get a **Bad command or file name** message, **C:\DOS** is not in the PATH command of your AUTOEXEC.BAT file. However, you can probably complete this exercise if you **type** PATH C:\DOS ↵ and repeat step 2 (see Exercise 66, page 168).

STEPS to

Display all commands

- **Type** FASTHELP ↵

Display information about a DOS command

1 **Type** FASTHELP
2 **Press** Space
3 **Type** the name of the command you want information about.
4 **Press** ↵

DOS 5 users skip Exercise 30.

1 • If necessary, **access** the DUPLICATE Learning Disk on drive A: and **change** to this common DOS prompt: `A:\>`

2 **Display a list of DOS commands and their definitions:**

- **Type** FASTHELP ↵
  The first screenful of commands appears, with `---More---` at the bottom of the screen.
- **Press** ↵
  The second screenful of commands appears, with `---More---` at the bottom of the screen.
- **Press** ↵ three more times to view all the commands.
  The DOS prompt appears at the bottom of the screen.

  NOTE: If this command does not work, see IMPORTANT note in "Terms and Notes."

3 • **Clear** the screen (review, Exercise 4).

4 **Print the list of DOS commands and their definitions:**

- **Type** `FASTHELP>PRN` ↵
  The first page is ejected.
- **Force** the printer to eject the second page (review, Exercise 12).

5 **Use FASTHELP to get information about a command:**

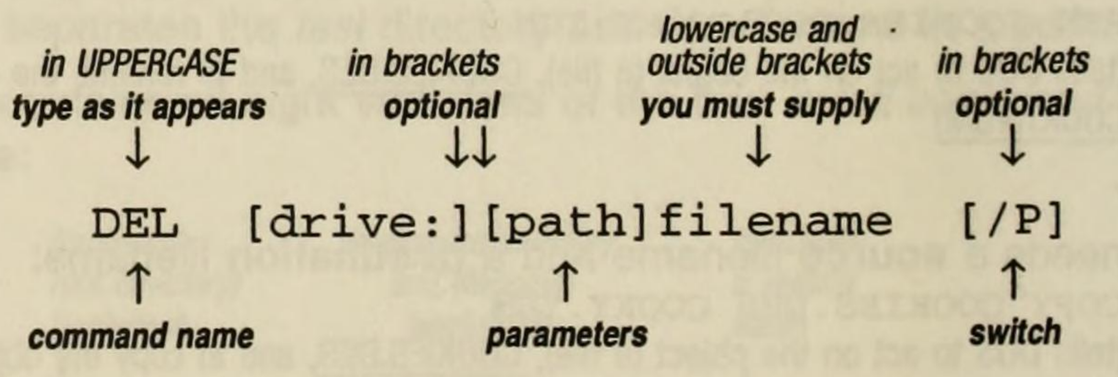
- **Type** `FASTHELP DEL` ↵

```
1  Deletes one or more files.

2  DEL [drive:][path]filename [/P]
3  ERASE [drive:][path]filename [/P]

4   [drive:][path]filename  Specifies the file(s) to delete.  Specify multiple
                            files by using wildcards.
5   /P                      Prompts for confirmation before deleting each file.
```

line 1 defines the *command name* (the action) in the result box above.
line 2 displays the parts of the DOS command and uses the following system to help you:
- Items in *uppercase* must be typed as they appear.
- Items in *lowercase* and with *no brackets* represent an item which *you* must supply, in this case, a *filename*.
- Items inside the *square brackets* are *optional*.



line 3 shows a different *command name* to do the same job.
line 4 explains the *parameters*.
line 5 explains what the *switch* does.

6 • **Use** FASTHELP to get information about other DOS commands of your choice. Simply type FASTHELP and then the DOS command name.

7 • **Skip** Exercise 31 (for DOS 5 users only) and **go on** to Exercise 32 or **take** the disk out of drive A: and turn the computer off.

DOS 6 users skip Exercise 31

❶ • If necessary, **access** the DUPLICATE Learning Disk on drive A: and **change** to this common DOS prompt: `A:\>`

❷ Display a list of DOS commands and their definitions:

- **Type** HELP ↵
  NOTE: If this command does not work, see IMPORTANT note in "Terms and Notes."
  The first screenful of commands appears, with `---More---` at the bottom of the screen.
- **Press** ↵
  The second screenful of commands appears, with `---More---` at the bottom of the screen.
- **Press** ↵ three more times to view all the commands.
  The DOS prompt appears at the bottom of the screen.

❸ • **Clear** the screen (review, Exercise 4).

❹ Print the list of DOS commands and their definitions:

- **Type** `HELP>PRN` ↵
  The first page is ejected.
- **Force** the printer to eject the second page (review, Exercise 12).

❺ Use HELP to get information about a command:

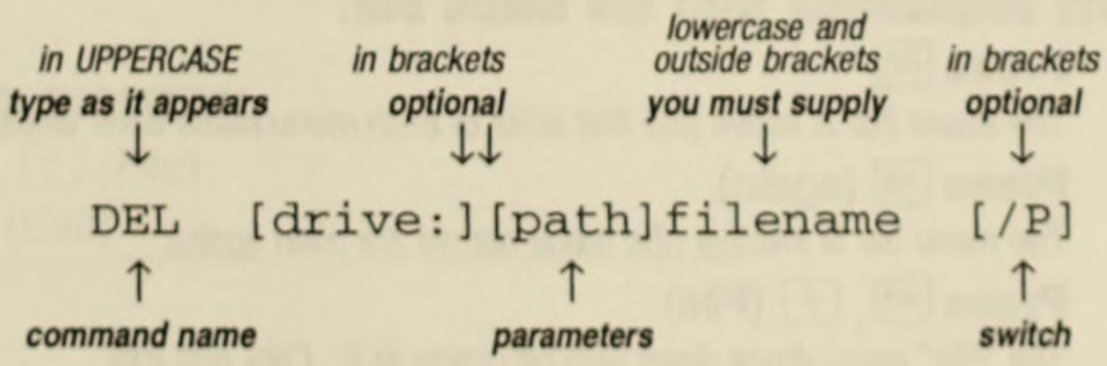
- **Type** `HELP DEL` ↵

```
1 | Deletes one or more files.

2 | DEL [drive:][path]filename [/P]
3 | ERASE [drive:][path]filename [/P]

4 |  [drive:][path]filename  Specifies the file(s) to delete.  Specify multiple
                             files by using wildcards.
5 |  /P                     Prompts for confirmation before deleting each file.
```

line 1 defines the *command name* (the action) in the result box above.
line 2 displays the parts of the DOS command and uses the following system to help you:
- Items in *uppercase* must be typed as they appear.
- Items in *lowercase* and with *no brackets* represent an item which *you* must supply, in this case, a *filename*.
- Items inside the *square brackets* are *optional*.



line 3 shows a different *command name* to do the same job.
line 4 explains the *parameters*.
line 5 explains what the *switch* does.

❻ • **Use** HELP to get information about other DOS commands of your choice. Simply type HELP and then the DOS command name.

❼ • **Skip** Exercise 32 and **go on** to Exercise 33
or **take** the disk out of drive A: and turn the computer off.

EXERCISE 31

DOS 5 only

HELP

Provides information about DOS commands.

OBJECTIVES:
- display a list of the DOS commands and their definitions
- print the list of the DOS commands and their definitions
- use the HELP command to get information about a DOS command

- Terms and Notes -

NOTE: FASTHELP in DOS version 6 is the same as HELP in DOS version 5.

IMPORTANT: HELP is an **external command**. If you get a **Bad command or file name** message, **C:\DOS** is not in the PATH command of your AUTOEXEC.BAT file. However, you can probably complete this exercise if you **type** C:\DOS ↵ and repeat step 2 (see Exercise 66, page 168).

STEPS to

Display all commands
- Type `HELP` ↵

Display information about a DOS command
1 Type `HELP`
2 Press Space
3 Type the name of the command you want information about.
4 Press ↵

EXERCISE 32

DOS 6 only

HELP

Starts the Help program that provides in-depth help with DOS commands.

OBJECTIVES:

- start the Help program
- use the menu bar
- get information about a DOS command
- print information about a DOS command
- exit the Help program
- use HELP to go directly to information about a command

- Terms and Notes -

syntax
The *language* of DOS commands.

jump
An item in the Help program that is enclosed in *angle brackets*, for example, <Dir>.

Using the keyboard in Help

To move cursor	Press
left one character	←
right one character	→
left one word	Ctrl + ←
right one word	Ctrl + →
up one line	↑
down one line	↓
to beginning of line	Home
to end of line	End
to beginning of topic	Ctrl + Home
to end of topic	Ctrl + End
to next jump	Tab
to previous jump	Shift + Tab
to a jump starting with a certain letter	the letter
to previous jump starting with a certain letter	Shift + letter

To	Press
display information about a DOS command	Move to command & press ↵
go to next topic	Alt + N
go to previous topic	Alt + B
go to contents list	Alt + C
search for text	Alt + S, F
repeat a search	F3
print	Alt + F, P
get help with "Help"	Alt + H
exit Help	Alt + F, X

DOS 5 users skip Exercise 32

DOS 6's HELP program

DOS 6 has a new Help program which offers more in-depth command explanations than you will find with the FASTHELP command. The Help program gives you three kinds of information for most commands:

- syntax — The language of DOS commands.
- notes — Information about how the command works.
- examples — Examples of ways to use the command.

❶ • If necessary, **access** the DUPLICATE Learning Disk on drive A: and **change** to this common DOS prompt: `A:\>`

❷ Start the Help program:

- **Type** `HELP` ↵

*IMPORTANT: HELP is an **external command**. If you get a **Bad command or file name** message, **C:\DOS** is not in the PATH command of your AUTOEXEC.BAT file. However, you can probably complete this exercise if you type PATH C:\DOS ↵ and repeat step 2 (see Exercise 66, page 168).*

This Help screen appears:

```
 File  Search                                                        Help
──────────────────── MS-DOS Help: Command Reference ────────────────────

Use the scroll bars to see more commands. Or, press the PAGE DOWN key. For
more information about using MS-DOS Help, choose How to Use MS-DOS Help
from the Help menu, or press F1. To exit MS-DOS Help, press ALT, F, X.

<ANSI.SYS>                <Erase>                  <Multi-config>
<Append>                  <Exit>                   <Nlsfunc>
<Attrib>                  <Expand>                 <Numlock>
<Batch commands>          <Fasthelp>               <Path>
<Break>                   <Fastopen>               <Pause>
<Buffers>                 <Fc>                     <Power>
<Call>                    <Fcbs>                   <POWER.EXE>
<Cd>                      <Fdisk>                  <Print>
<Chcp>                    <Files>                  <Prompt>
<Chdir>                   <Find>                   <Qbasic>
<Chkdsk>                  <For>                    <RAMDRIVE.SYS>
<CHKSTATE.SYS>            <Format>                 <Rd>
<Choice>                  <Goto>                   <Rem>
<Cls>                     <Graphics>               <Ren>
<Command>                 <Help>                   <Rename>
<CONFIG.SYS commands>     <HIMEM.SYS>              <Replace>
<Copy>                    <If>                     <Restore>
<Alt+C=Contents> <Alt+N=Next> <Alt+B=Back>                  00006:002
```

*NOTE: This very simple program has a **menu bar** at the top of the screen with three menus: File, Search, and Help.*

❸ Get acquainted with the menu bar:

- **Press** Alt
  *The **menu bar** is active (the first letter of each menu name turns white).*
- **Press** Alt (again)
  The menu bar is inactive (the menu names are plain again).
- **Press** Alt, F **(File)**
  The "File" menu drops down with two items in it: Print and Exit.

  *NOTE: The comma between keys means to **press** Alt and then **press** F (one after the other, **not** together).*
- **Press** Alt, S **(Search)**
  The "Search" menu drops down with two items in it: Find... and Repeat Last Find F3.
- **Press** Alt, H **(Help)**
  The "Help" menu drops down with two items in it: How to Use MS-DOS Help and About...
- **Press** Alt twice (or until the menu bar is inactive and the *cursor* is returned to the command list).

Exercise 32 continued...

❹ Get information about a command:

- **Press** D
  The cursor jumps to <Date>.
- **Press** ↓ until the cursor is on <Del>.
- **Press** ↵
  The "MS-DOS Help: DEL (Erase)" screen appears.

  *NOTE: You are in the **syntax** information screen, and the cursor is on ◂Notes▸ with ◂Example▸ to the right (**syntax**, **notes**, and **example** are the three kinds of help can get about a DOS command).*
- **Press** ↓ until you reach the bottom of the screen.
- **Press** ↑ until you reach the top of the screen.
  The cursor is back on ◂Notes▸.
- **Press** ↵
  The "MS-DOS Help: DEL--Notes" screen appears with the cursor on ◂Example▸ and with ◂Syntax▸ to the right.
- **Press** ↓ until you reach the bottom of the screen.
- **Press** ↑ until you reach the top of the screen.
  The cursor is back on ◂Example▸.
- **Press** ↵
  The "MS-DOS Help: DEL--Examples" screen appears with the cursor on ◂Syntax▸ and with ◂Notes▸ to the right.

  NOTE: The diamond (♦) at the bottom of the screen indicates the end of a topic.

❺ Print information about a command:

- **Press** Alt, F (File)
- **Press** P (Print)
  *The printer **dialog box** appears (dialog boxes will be covered in Lesson 6).*
- **Move** the "dot" to the printer if it is not already there (press ↑).
- **Be sure** that the printer is ready to receive data.
- **Press** ↵
  With the Help program, the printer automatically ejects the paper even though there is not a full page.

❻ Return to the commands list and print it:

- **Press** Alt+C (Contents)
- **Print** the commands list (see step 5).

❼ Exit the Help program:

- **Press** Alt, F (File)
- **Press** X (Exit)

```
A:\>
```

❽ Use HELP to go directly to information about a command:

- **Type** `HELP DEL` ↵
  DOS starts the Help program and moves directly to information about DEL.

❾
- **Exit** the Help program (see step 7).

```
A:\>
```

❿
- **Go on** to Exercise 33
  or **take** the disk out of drive A: and turn the computer off.

Exercise 32 (continued)
HELP—DOS 6 only

Using the mouse in Help

to scroll the information in the Help window
click the arrows in the scroll bar

to display information about a DOS command
click the desired command

to go to the next topic
click *next* at bottom of screen

to go to the previous topic
click *back* at bottom of screen

to go the contents list
click *contents* at bottom of screen

to search for text
click Search, then Find...

to print
click File, then Print...

to get help with the Help program
click Help, then How to Use MS-DOS Help

to exit Help program
click File, then Exit

to select any item
click it

STEPS to

Display information about a DOS command
FROM THE DOS PROMPT:
1 Type `HELP`
2 Press Space
3 Type the name of the command you want information about.
4 Press ↵

Start the Help program
- Type `HELP` ↵

Exit the Help program
- Press Alt, F, X

EXERCISE 33

CHKDSK (check disk)

Gives you information about your disk and your computer's memory.

OBJECTIVES:

- use CHKDSK to check the DUPLICATE Learning Disk in drive A:
- identify the meaning of each line in a CHKDSK report

- Terms and Notes -

hidden files
Files that are given the "hidden" attribute. The DOS attribute command, ATTRIB, is not covered in this book.

bad sectors
Areas on a disk that DOS marks as unusable when the disk is formatted. A few *bad sectors* do not necessarily make the entire *disk* unusable.

However, a disk with *bad sectors* should not be used as a *target* disk when copying a disk with the DISKCOPY command.

STEPS to

Check a disk

1 **Type** CHKDSK ↵
2 **Press** Space
3 **Type** the letter of the drive to be checked.
4 **Press** :
5 **Press** ↵

What does CHKDSK do?

CHKDSK reports:

- the size of your disk (in bytes);
- the number of directories, files, and hidden files;
- bad sectors on your disk (usually unimportant);
- the amount of unused space on your disk; and
- the amount of the *computer's* memory and how much of it is unused.

While CHKDSK can fix certain problems on your disk, this book instructs you to simply examine the report that CHKDSK creates.

❶ • If necessary, **access** the DUPLICATE Learning Disk on drive A: and **change** to this common DOS prompt: `A:\>`

❷ Check your DUPLICATE Learning Disk:

• **Type** CHKDSK A: ↵

*IMPORTANT: CHKDSK is an **external command**. If you get a **Bad command or file name** message, **C:\DOS** is not in the PATH command of your AUTOEXEC.BAT file. However, you can probably complete this exercise if you type PATH C:\DOS ↵ and repeat step 2 (see Exercise 66, page 168).*

The computer works for a few seconds and then displays a report like this:

5¼" High Density Disk (1.2MB)

```
          Volume LEARNING    created 05-02-1993 8:50p
          Volume Serial Number is XXXX-XXXX

line 1       1213952 bytes total disk space
line 2          3584 bytes in 7 directories
line 3        122880 bytes in 57 user files
line 4       1087488 bytes available on disk

line 5           512 bytes in each allocation unit
line 6          2371 total allocation units on disk
line 7          2124 available allocation units on disk

line 8        655360 total bytes memory
line 9        574448 bytes free
```

*NOTE: "Total bytes memory" and "bytes free" may be different. If you are using CHKDSK on a 3½" high density disk, all **disk space** numbers will be different.*

The line items for the result box above tell you:

Line 1 the **exact** total number of bytes on your disk (line 5 x line 6).
(Hidden files, if any exist on your disk, are shown between lines 1 and 2.)

Line 2 how many directories there are on the disk (each directory uses 512 bytes).

Line 3 how many files on the disk and how many bytes they are using.
(Bad sectors, if any exist on your disk, are shown between lines 3 and 4.)

Line 4 how much space is left on the disk (in bytes).

Line 5 how many bytes in each "allocation unit" (the way DOS groups disk space).

Line 6 how many "allocation units" on the disk (line 5 x line 6 = line 1).

Line 7 how many "allocation units" are unused on the disk.

Line 8 the total "conventional" computer memory (in bytes). This number does not reflect added memory that may be available in what is called "extended" computer memory.

Line 9 how much "conventional" computer memory is available.

❸ • **Go on** to Exercise 34
or **take** the disk out of drive A: and turn the computer off.

Finding a file

Do you have any idea where the file named AGENDA.DOC is on the DUPLICATE Learning Disk? What directory would you list to find it?

What if you had 100 directories and you forgot what directory your file was in but you remembered the filename. DIR, with the /S switch, can help you find your files. /S is the DIR switch that instructs DOS to search the *current directory and* directories *under* the *current directory*.

1 • If necessary, **access** the DUPLICATE Learning Disk on drive A: and **change** to this common DOS prompt: `A:\>`

2 **Use DIR to list all the files on the DUPLICATE Learning Disk:**

The root directory must be current to list *all* the files on the disk.

- **Type** `DIR/S/P` ↵
  DOS lists the first screenful and prompts you to "Press any key to continue..."
- **Press** any key.
  DOS lists the second screenful and prompts you to "Press any key to continue..."
- Continue pressing any key until the DOS prompt appears at the bottom of the screen.

```
A:>\
```

3 • **Clear** the screen (review, Exercise 4).

4 **Find the file named AGENDA.DOC:**

- **Type** `DIR AGENDA.DOC /S` ↵
  NOTE: DOS will look through every directory on the disk to find AGENDA.DOC.
  DOS lists the ***path*** *to the file, so you can see that AGENDA.DOC is in the DATA directory.*

```
Directory of A:\PROGRAMS\DATA

AGENDA   DOC         10 05-25-93   9:32p
       1 file(s)          10 bytes

Total files listed:
       1 file(s)          10 bytes
                     XXXXXX bytes free
```

5 **Find all the files ending with .DES:**

- **Type** `DIR *.DES /S` ↵
  DOS lists some .DES files in the root directory and some in the GOODIES directory.

```
Directory of A:\

PUDDING  DES         11 05-02-93   8:19p
JELLO    DES          9 05-02-93   8:23p
       2 file(s)          20 bytes

Directory of A:\FOOD\GOODIES

CAKE     DES          8 05-02-93   8:45p
COOKIES  DES         11 05-02-93   8:46p
ICECREAM DES         12 05-02-93   8:46p
PIE      DES          7 05-02-93   8:46p
       4 file(s)          38 bytes

Total files listed:
       6 file(s)          58 bytes
                     XXXXXX bytes free
```

6 • **Go on** to Exercise 35
or **take** the disk out of drive A: and turn the computer off.

EXERCISE 34
Find files

Locate files when you know the filename but do not know what directory they are in.

OBJECTIVES:

- list all the files on a disk
- find a file when you do not know what directory it is in
- find a group of files that may be in more than one directory

– Terms and Notes –

subdirectory switch (/S)
A switch used with the DIR command that tells DOS to look not only in the *current directory* but in every directory *under* the *current directory* when it lists files. If you are in the *root* directory, DOS will search in every directory on the disk.

NOTE: A file with the same name can exist in different directories — they may or may not contain the same data.

STEPS to

Find a file

1 **Change** to the root directory.
2 **Type** `DIR`
3 **Press** Space
4 **Type** the filename of the file to find.
5 **Press** Space
6 **Type** `/S` ↵
DOS displays the file and the directory the file was found in.

Find a group of files

1 **Change** to the root directory.
2 **Type** `DIR`
3 **Press** Space
4 **Type** a filename pattern for the group of files to find.
5 **Press** Space
6 **Type** `/S` ↵
DOS displays the files and the directory the file was found in.

List every file on a disk

• **Type** `DIR/S` ↵

EXERCISE 35

Cancel a command

Stop DOS from completing a command.

OBJECTIVES:

- stop a command before DOS has completed it
- stop and start scrolling

Canceling or stopping a command

You can stop DOS from completing a command by pressing Ctrl + C or Ctrl + Break. However, actions that DOS has completed *before* you **cancel a command** cannot be undone.

1

- If necessary, **access** the DUPLICATE Learning Disk on drive A: and **change** to this common DOS prompt: `A:\>`

2 **Cancel the DIR command:**

- **Type** `DIR/S/P` ↵
  DOS lists the first screenful and prompts you to "Press any key to continue..."
- **Press** any key.
  DOS lists the second screenful and prompts you to "Press any key to continue..."
- **Press** Ctrl + C
  The break symbol (^C) appears where DOS got the command to stop.

```
Press any key to continue . . .
^C

A:\>
```

3 **Cancel the CHKDSK command:**

- **Type** `CHKDSK` ↵
- **Quickly press** Ctrl + C
  The break symbol (^C) appears where DOS got the command to stop.

```
^C

A:\>
```

4 **Stop and start scrolling, then cancel a DIR command:**

- **Locate** the Ctrl and S keys and **be ready to hold down** Ctrl while you **tap** S to stop and start the scrolling.
- **Type** `DIR C:/S` ↵
  NOTE: Most hard disks have enough directories and files to list to allow you the time necessary to perform this step.
  Files begin scrolling quickly on the screen.
- **Hold down** Ctrl, and **tap** S about 3 to 5 times, ending with the *scrolling stopped*, then **release** Ctrl.
- **Press** Ctrl + C
  The break symbol (^C) appears where DOS got the command to stop.

```
^C

A:\>
```

- **Repeat** this step a few times. (The first time through, DOS may complete the action before you get a chance to **cancel** the command.)

5

- **Go on** to Exercise 36
  or **take** the disk out of drive A: and turn the computer off.

STEPS to

Cancel a command

1 **Type** a DOS command as you normally would.
2 **Press** Ctrl + C
The command stops, and DOS displays a new DOS prompt.

EXERCISE 36

Repeat a command

Use F3 to quickly reproduce the previous DOS command.

OBJECTIVES:

- repeat the previous command
- repeat the previous command and add to the command
- repeat the previous command and add to the command so it will print

1 • If necessary, **access** the DUPLICATE Learning Disk on drive A: and **change** to this common DOS prompt: `A:\>`

2 • **Type** `DIR \FOOD\VEGGIES` ↵

```
 Volume in drive A is LEARNING
 Volume Serial Number is XXXX-XXXX
 Directory of A:\FOOD\VEGGIES

.            <DIR>      05-02-93   8:27p
..           <DIR>      05-02-93   8:27p
CABBAGE  VEG           11 05-02-93   8:47p
CARROTS  VEG           11 05-02-93   8:47p
KALE     VEG            8 05-02-93   8:47p
LETTUCE  VEG           11 05-02-93   8:47p
CELERY   VEG           10 05-02-93   8:48p
        7 file(s)          51 bytes
                      XXXXXX bytes free
```

3 Repeat the previous command:

- **Press** F3

```
A:\>DIR \FOOD\VEGGIES
```

- **Press** ↵

DOS lists the files just as it did in step 2.

4 Repeat the previous command and add something to it:

- **Press** F3

```
A:\>DIR \FOOD\VEGGIES
```

- **Type** `/O` ↵

DOS lists the files in alphabetical order.

```
 Directory of A:\FOOD\VEGGIES

.            <DIR>      05-02-93   8:27p
..           <DIR>      05-02-93   8:27p
CABBAGE  VEG           11 05-02-93   8:47p
CARROTS  VEG           11 05-02-93   8:47p
CELERY   VEG           10 05-02-93   8:48p
KALE     VEG            8 05-02-93   8:47p
LETTUCE  VEG           11 05-02-93   8:47p
        7 file(s)          51 bytes
                      XXXXXX bytes free
```

- **Press** F3

```
A:\>DIR \FOOD\VEGGIES/O
```

- **Type** `:S` ↵

DOS lists the files in order by size of file.

```
 Directory of A:\FOOD\VEGGIES

.            <DIR>      05-02-93   8:27p
..           <DIR>      05-02-93   8:27p
KALE     VEG            8 05-02-93   8:47p
CELERY   VEG           10 05-02-93   8:48p
CABBAGE  VEG           11 05-02-93   8:47p
CARROTS  VEG           11 05-02-93   8:47p
LETTUCE  VEG           11 05-02-93   8:47p
        7 file(s)          51 bytes
                      XXXXXX bytes free
```

5 Print the list of files shown above:

- **Press** F3

```
A:\>DIR \FOOD\VEGGIES/O:S
```

- **Type** `>PRN` ↵
- **Force** the printer to eject the paper.

6 • **Go on** to Exercise 37
or **take** the disk out of drive A: and turn the computer off.

STEPS to

Repeat the previous command

- Press F3 ↵

Repeat the previous command and add something to it

1 Press F3
2 Type the addition to the command.
3 Press ↵

EXERCISE 37

Correct a command

Use F1 to repeat the previous command—one character at a time—and replace, insert, or delete one or more characters.

OBJECTIVES:

- correct a command by *replacing* an incorrect character with the proper one
- correct a command by *deleting* character(s)
- correct a command by *inserting* character(s)
- correct different kinds of errors in the same command
- repeat the remaining command quickly after making corrections

- Terms and Notes -

NOTE: You must have completed a command by pressing [↵] before you can use this method to make corrections.

Correcting commands with [F1]

You typed a long command, pressed enter, and then discovered that you made a mistake in the second character. You do not want to type the whole command out again. What can you do?
Use F1 to repeat the previous command—one character at a time—and make alterations to the command along the way.

- to replace characters, type the new character(s)
- to delete characters, press delete
- to insert characters, press insert and type the new character(s)

After making a correction, you can quickly repeat the *remaining* command characters by pressing [F3].

1 • If necessary, **access** the DUPLICATE Learning Disk on drive A: and **change** to this common DOS prompt: `A:\>`

2 **Change one character in the previous command:**

- **Type** `DIR *.XES` [↵]

```
File not found
```

- **Press** [F1] 6 times (repeat up to, but not including, X)

```
DIR *.
```

- **Type** `D`

```
DIR *.D
```

- **Press** [F1] 2 more times to complete the command.

```
DIR *.DES
```

- **Press** [↵]

```
 Directory of A:\

PUDDING  DES         11 05-02-93   8:19p
JELLO    DES          9 05-02-93   8:23p
       2 file(s)           20 bytes
                      XXXXXX bytes free
```

3 **Change one character and use [F3] to complete the command:**

- **Type** `DIR \GOOD\VEGGIES\CARROTS.VEG` [↵]

```
Path not found
```

- **Press** [F1] 5 times (repeat up to, but not including, G)

```
DIR \
```

- **Type** `F`

```
DIR \F
```

- **Press** [F3] (to quickly repeat the remaining command)

```
DIR \FOOD\VEGGIES\CARROTS.VEG
```

- **Press** [↵]

```
 Directory of A:\FOOD\VEGGIES

CARROTS  VEG         11 05-02-93   8:47p
       1 file(s)           11 bytes
                      XXXXXX bytes free
```

STEPS to

Steps to are on the next page.

Exercise 37 continued...

❹ Delete a character in the previous command:

- **Type** DIR \GFOOD\VEGGIES\CARROTS.VEG ↵

```
Path not found
```

- **Press** F1 5 times (repeat up to, but not including, G)

```
DIR \
```

- **Press** Del

Nothing seems to happen, but you just deleted the G.

- **Press** F3

```
DIR \FOOD\VEGGIES\CARROTS.VEG
```

- **Press** ↵

```
 Directory of A:\FOOD\VEGGIES

CARROTS  VEG         11 05-02-93   8:47p
       1 file(s)          11 bytes
                      XXXXXX bytes free
```

❺ Insert a character in the previous command:

- **Type** DIR \FOOD\EGGIES\CARROTS.VEG ↵

```
Path not found
```

- **Press** F1 10 times (repeat up to, but not including, E)

```
DIR \FOOD\
```

- **Press** Ins
- **Type** V

```
DIR \FOOD\V
```

- **Press** F3

```
DIR \FOOD\VEGGIES\CARROTS.VEG
```

- **Press** ↵

```
 Directory of A:\FOOD\VEGGIES

CARROTS  VEG         11 05-02-93   8:47p
       1 file(s)          11 bytes
                      XXXXXX bytes free
```

❻ Replace more than one character to correct a command:

- **Type** DOE \FOOD\FOODIES*.DES ↵

```
Bad command or file name
```

- **Press** F1

```
D
```

- **Type** IR

```
DIR
```

- **Press** F1 7 times (up to but not including the F in FOODIES)

```
DIR \FOOD\
```

- **Type** G

```
DIR \FOOD\G
```

- **Press** F3

```
DIR \FOOD\GOODIES\*.DES
```

- **Press** ↵

```
 Directory of A:\FOOD\GOODIES

CAKE     DES           8 05-02-93   8:45p
COOKIES  DES          11 05-02-93   8:46p
ICECREAM DES          12 05-02-93   8:46p
PIE      DES           7 05-02-93   8:46p
       4 file(s)          38 bytes
                      XXXXXX bytes free
```

Exercise 37 continued...

STEPS to

Replace a character to correct a command

1 **Press** F1 until you are one character before the incorrect character.
2 **Type** the correct character.
3 **Press** F3

Delete a character to correct a command

1 **Press** F1 until you are one character before the character to delete.
2 **Press** Del
3 **Press** F3

Insert a character to correct a command

1 **Press** F1 until you are one character before the location to insert a character.
2 **Press** Ins
3 **Type** the new character.
4 **Press** F3

7 **Insert more than one character to correct a command:**

- **Type** `D *.LET` ↵

```
Bad command or file name
```

- **Press** F1 once
- **Press** Ins
- **Type** `IR`
- **Press** F3 ↵

```
 Directory of A:\

JONES    LET          9 05-02-93   7:48p
SMITH    LET          9 05-02-93   8:13p
LOPEZ    LET          9 05-02-93   8:13p
       3 file(s)          27 bytes
                       XXXXXX bytes free
```

8 **Delete more than one character to correct a command:**

- **Type** `DIRRR SMITH.*` ↵

```
Bad command or file name
```

- **Press** F1 2 times (up to the first R)
- **Press** Del Del F3 ↵

```
 Directory of A:\

SMITH    LET          9 05-02-93   8:13p
SMITH    RPT          9 05-02-93   8:20p
SMITH    MEM          9 05-02-93   8:20p
       3 file(s)          27 bytes
                       XXXXXX bytes free
```

9 **Correct different kinds of errors in a command:**

- **Type** `DR \FOODS\GOODIES\*.DEZ`

```
Bad command or file name
```

- **Press** F1

```
D
```

- **Press** Ins
- **Type** `I`

```
DI
```

- **Press** F1 7 times (up to but not including the S)

```
DIR \FOOD
```

- **Press** Del

Nothing seems to happen, but you just deleted the S.

- **Press** F3

```
DIR \FOOD\GOODIES\*.DEZ
```

- **Press** BkSp

```
DIR \FOOD\GOODIES\*.DE
```

- **Type** `S`

```
DIR \FOOD\GOODIES\*.DES
```

- **Press** ↵

```
 Directory of A:\FOOD\GOODIES

CAKE     DES          8 05-02-93   8:45p
COOKIES  DES         11 05-02-93   8:46p
ICECREAM DES         12 05-02-93   8:46p
PIE      DES          7 05-02-93   8:46p
       4 file(s)          38 bytes
                       XXXXXX bytes free
```

10 • **Go on** to Exercise 38
or **take** the disk out of drive A: and turn the computer off.

Running programs

Programs (also called applications) are stored on disks in files that have extensions of .EXE, .BAT, or .COM, for example, WP.EXE or AUTOEXEC.BAT.

You tell DOS to run a program simply by typing the program's filename — without the period and extension. To run WP.EXE, for example, just type WP and press ↵.

When you type a program's filename, DOS looks for the file in the current directory. If the program is stored in a different directory, you can *change* to its directory before you run the program (CD\PROGRAMS), or you can *type* the path to the directory in front of the program's filename (\PROGRAMS\WP).

If you use a program a lot, it is common to put its directory in a **path** that DOS searches whenever an external command or program filename is issued. The PATH command is examined in Lesson 7, Automating DOS.

1 • If necessary, **access** the DUPLICATE Learning Disk on drive A: and **change** to this common DOS prompt: `A:\>`

2 Find the program files on the DUPLICATE Learning Disk:

- **Type** `DIR *.EXE /S` ↵

DOS lists three "mock" program files that were put on this disk for you to work with.

```
Directory of A:\PROGRAMS
DB       EXE     31458 04-22-93   3:21p
SS       EXE     31374 04-22-93   3:06p
WP       EXE     31426 04-22-93   3:10p
        3 file(s)      94258 bytes
Total files listed:
        3 file(s)      94258 bytes
                     XXXXXX bytes free
```

3 Run a program that is in a different directory:

- **Type** `\PROGRAMS\WP` ↵

```
                    * * * Word Processing Program * * *
If this was a real word processing program
you would use it to:
     * Type in text to create documents.
     * Edit (revise) what you have typed.
     * Format text (such as underline, bold, and center).
     * Save your documents to disk files.
     * Print your documents.
Press <Enter> to exit this program ?
```

- **Press** ↵

```
A:\>
```

4 Run a file that is in the current directory:

- **Change** to the PROGRAMS directory (review, Exercise 14).

```
A:\PROGRAMS>
```

- **Type** DB ↵

```
                    * * * Database Program * * *
If this was a real database program
you would use it to:
     * Create a record structure for a database file.
     * Add data into the records.
     * Find and modify database records.
     * Query the database -- ask it to show specific records.
     * Create and print reports that summarize the records.
Press <Enter> to exit this program ?
```

- **Press** ↵

```
A:\PROGRAMS>
```

Exercise 38 continued...

EXERCISE 38

Run a program

Load a program into the computer's memory and start it.

OBJECTIVES:

- find program files that use .EXE extensions
- run a program in a different directory
- run a program in the current directory
- examine a *batch* program file
- run a *batch* program file

– Terms and Notes –

program (also, application)
A set of instructions that your computer carries out to perform a specific task, such as word processing. Programs are saved as files with filename extensions of:

.EXE (for execution file),
.BAT (for batch file), or
.COM (for command file).

NOTE: Every time you use an **external** DOS command, you are **running a program.** External DOS commands have either a .COM or .EXE filename extension.

STEPS to

Run a program in the current directory

1 **Type** the program's filename—without the period or extension.
2 **Press** ↵

Run a program that is not in the current directory

1 **Type** the path to the program file.
2 **Type** \
3 **Type** the program's filename—without the period or extension.

Exercise 38 (continued)
Run a program

batch file
A text file that contains a list of DOS commands that DOS carries out as a set when you run it. Batch files are given a .BAT filename extension when they are created.

❺ Examine a BATCH program file:

- **Type** DIR *.BAT ↵

```
 Directory of A:\PROGRAMS
SHOWME   BAT       139 04-22-93   3:59p
       1 file(s)          139 bytes
                      XXXXXX bytes free
```

- **Type** TYPE SHOWME.BAT ↵

```
ECHO OFF
CLS
TYPE OPENING.DAT
PAUSE
CLS
TYPE CD.DAT
PAUSE
CLS
TYPE CLS.DAT
PAUSE
CLS
```

NOTE: Batch files are a series of DOS command that DOS executes one after the other. Do you recognize some of the commands used in the SHOWME.BAT batch file above? CLS and TYPE are two commands you should be familiar with. What does PAUSE do? Use HELP to get information about PAUSE. Batch files are covered in Lesson Seven.

- DOS 6 users: **Type** FASTHELP PAUSE ↵
  DOS 5 users: **Type** HELP PAUSE ↵

```
Suspends processing of a batch program and displays the message "Press any
key to continue...."
PAUSE
```

❻ Run a "batch" program file:

- **Type** SHOWME ↵

```
                  DOS COMMANDS & EXAMPLES

This batch file program uses the TYPE command
to show DOS commands and examples.
You can press any key until you get to the command you want help on.
Press any key to continue . . .
```

- **Press** any key.

```
                  CD -- CHANGE DIRECTORY

Use the CD command to:
  * show the current directory
  * change to a specified directory
examples:
=========
CD          show current directory
CD\DOS      change to the DOS directory
CD..        change to the parent directory
CD Level2   change to the LEVEL2 directory below current directory
Press any key to continue . . .
```

- **Press** any key.

```
                  CLS -- CLEAR SCREEN

Use the CLS command to clear the screen and show the DOS prompt at
the top of the screen.
example:
========
CLS
Press any key to continue . . .
```

- **Press** any key.

```
A:\PROGRAMS>
```

❼

- **Change** to the root directory.

```
A:\>
```

❽

- **Go on** to Exercise 39
  or **take** the disk out of drive A: and turn the computer off.

❶ • If necessary, **access** the DUPLICATE Learning Disk on drive A: and **change** to this common DOS prompt: `A:\>`

❷ Display the computer's date:

• **Type** `DATE` ↵

DOS displays "Current date" (yours is different) and prompts you to "Enter new date:"

```
Current date is Fri 07-09-1993
Enter new date (mm-dd-yy):
```

• **Press** ↵

DOS returns you to the DOS prompt without changing the date.

```
A:\>
```

❸ Change to an incorrect date:

• **Type** `DATE` ↵

DOS displays "Current date" (yours is different) and prompts you to "Enter new date:"

```
Current date is Fri 07-09-1993
Enter new date (mm-dd-yy):
```

Notice the prompt (mm-dd-yy):

mm means to type the **month** using two numbers (to represent a month that has only one number (May) you may either enter a single digit (5) or put a zero before a single digit (05)).

dd means to type the **day of the month** using two numbers (again, to represent a day that has only one number you may either enter a single digit or put a zero (0) before a single digit).

yy means to type the **year** using the last two numbers of the year.

– means to type a hyphen (–) between the month and day, and the day and year, as the prompt shows.

• **Type** `01-31-99` ↵

DOS changes the date and returns you to the DOS prompt.

```
A:\>
```

❹ Change the computer's date to today's date:

• **Type** `DATE` ↵

DOS displays "Current date" and prompts you to "Enter new date:"

```
Current date is Sun 01-31-1999
Enter new date (mm-dd-yy):
```

• **Type** the number for today's month.
• **Type** –
• **Type** today's day (the number, not the day of the week).
• **Type** –
• **Type** the last two digits of the current year.
• **Press** ↵

```
A:\>
```

❺ • **Display** the computer's date (review, step 2). Do not change the date again; just press ↵ to return to the DOS prompt.

❻ • **Go on** to Exercise 40
or **take** the disk out of drive A: and turn the computer off.

EXERCISE 39

DATE

Displays or changes the computer's date.

OBJECTIVES:
- display the computer's date
- change to an incorrect date
- change the computer's date to the correct date

– Terms and Notes –

date parameters
The objects you want DOS to act on in the *DATE command*, that is, the *month*, *day*, and *year*. The format that DOS uses for the date is mm-dd-yy. To enter the date for October 5, 1994, for example, type:

`10-05-94` or
`10-5-94`

STEPS to

Display the date
• Type `DATE` ↵ ↵

Set the date
1 Type `DATE` ↵
2 Type the number for today's month.
3 Type `-` (hyphen)
4 Type the number for today's day.
5 Type `-` (hyphen)
6 Type the last two numbers of the current year.
7 Press ↵

EXERCISE 40

TIME

Displays or sets the computer's time.

OBJECTIVES:

- display the computer's time
- set an incorrect time
- enter a time that DOS does not understand
- set the computer's time to the current time

– Terms and Notes –

time parameters
The objects you want DOS to act on in the *TIME command*, that is, the *hour*, *minutes*, *seconds*, *hundredths*, and *a (am)* or *p (pm)*.
The format DOS uses for time is:
hour:minutes:seconds.hundredths a|p

You need not enter the seconds and hundredths to set the time. To enter the time for 3:05 pm, for example, type:

```
03:05p or
3:5p
```

STEPS to

Display the time
- **Type** `TIME` ↵ ↵

Set the time
1 **Type** `TIME` ↵
2 **Type** the number for the current hour.
3 **Type** :
4 **Type** the number for the current minute.
5 **Type** `A` (for am) or `P` (for pm).
6 **Press** ↵

1
- If necessary, **access** the DUPLICATE Learning Disk on drive A: and **change** to this common DOS prompt: `A:\>`

2 Display the computer's time:
- **Type** `TIME` ↵
  DOS displays "Current time" and prompts you to "Enter new time:"

```
Current time is  7:34:01.50p
Enter new time:
```

- **Press** ↵ (again)
  DOS returns you to the DOS prompt without changing the time.

```
A:\>
```

3 Change to an incorrect time:
- **Type** `TIME` ↵

```
Current time is  7:44:56.50p
Enter new time:
```

The following options are available in the *time* format:
hours:minutes:seconds.hundredths**a|p**

However, you may enter only:
hours:minutes**a|p**
(**a|p** means to use either ***a*** (for am) or ***p*** (for pm))

- **Type** `3:5P` ↵
  DOS returns you to the DOS prompt (without letting you see the new time).

```
A:\>
```

4 Display the new time:
- **Type** `TIME` ↵ ↵

```
Current time is  3:05:02.14p
Enter new time:
A:\>
```

5 Purposely enter a time that DOS does not understand:
- **Type** `TIME` ↵
  DOS reports the "Current time" and prompts you to "Enter new time:"
- **Type** `4:99P` ↵
  DOS reports that you entered an "Invalid time" and prompts you to "Enter new time:"

```
Invalid time
Enter new time:
```

- **Press** ↵

6 Enter the correct time:
- **Type** `TIME` ↵
  DOS reports the "Current time" and prompts you to "Enter new time:"
- **Type** the number for the current hour.
- **Type** :
- **Type** the number for the current minute.
- **Type** `A` (if it is am) or `P` (if it is pm).
- **Press** ↵
- **Repeat** step 4 to check the time if you desire.

7
- **Go on** to Exercise 41
  or **take** the disk out of drive A: and turn the computer off.

Disk volume labels

When you format your disk, you are given an opportunity to *name* your disk at the end of the format procedure. It is common *not* to give a disk a *volume name*. However, a name (volume label) can be useful for keeping track of disks, especially if a disk happens to lose its sticky label. You can easily change the *volume label* at any time by using the LABEL command (see the next exercise).

1 • If necessary, **access** the DUPLICATE Learning Disk on drive A: and **change** to this common DOS prompt: `A:\>`

2 **Display the volume label for the DUPLICATE Learning Disk:**

• **Type** `VOL` ↵

```
Volume in drive A is LEARNING
Volume Serial Number is XXXX-XXXX
```

3 **Display the volume label for the hard disk:**

• **Type** `VOL C:` ↵

DOS displays the volume label for the hard disk. Does it have a name?

NOTE: If a disk has no volume label, DOS displays this message:
Volume in drive X has no label

4 • **Go on** to Exercise 42
or **take** the disk out of drive A: and turn the computer off.

EXERCISE 41

VOL (volume)

Displays the disk's volume label (if it exists) and serial number.

OBJECTIVES:
- display the floppy disk's volume label
- display the hard disk's volume label

- Terms and Notes -

volume label
A name you assign to a disk.

serial number
A number that DOS assigns to a disk when it is formatted. The serial number cannot be changed unless you reformat the disk.

volume
The term used by DOS to represent a disk when giving it a name (label).

NOTE: If your disk has no **label**, DOS will tell you that the drive has "no label" when you use the VOL command. However, if your disk has no **serial number**, DOS will not display a line for it.

STEPS to

Display the volume label for the current disk
- Type `VOL` ↵

Display the volume label for a disk drive that is not current
1 Type `VOL`
2 Press Space
3 Type the drive letter that you want to display the volume label on.
4 Type :
5 Press ↵

EXERCISE 42
LABEL

Creates, changes, or removes a disk's name (volume label).

OBJECTIVES:
- change the floppy disk's name
- display the floppy disk's name
- remove the floppy disk's name
- create a name for the floppy disk

STEPS to

Create or change the current disk's name

1 **Type** LABEL
2 **Press** Space
3 **Type** the volume name.
4 **Press** ↵

Remove the current disk's name

1 **Type** LABEL ↵
DOS prompts you to ENTER for none (no name)
2 **Press** ↵
DOS prompts: Delete current volume label (Y/N)?
3 **Type** Y
4 **Press** ↵

Labeling your disks

You may create, change, or delete your disk's name (volume label) at any time using the LABEL command. The name can contain up to 11 characters including:

- the letters A to Z
- the numbers 0 through 9
- the symbols $ - _ { } and #
- and spaces

1 • If necessary, **access** the DUPLICATE Learning Disk on drive A: and **change** to this common DOS prompt: `A:\>`

2 **Change the label on the DUPLICATE Learning Disk:**

• **Type** LABEL A: DISK #1 ↵
Drive A:'s light comes on, and DOS returns you to the DOS prompt.

```
A:\>
```

*IMPORTANT: LABEL is an **external command**. If you get a **Bad command or file name** message, **C:\DOS** is not in the PATH command of your AUTOEXEC.BAT file. However, you can probably complete this exercise if you type PATH C:\DOS ↵ and repeat step 2 (see Exercise 66, page 168).*

• **Type** VOL ↵

```
Volume in drive A is DISK #1
Volume Serial Number is XXXX-XXXX
```

3 **Remove the volume label from the disk in drive A:**

• **Type** LABEL ↵

```
Volume in drive A is DISK #1
Volume Serial Number is XXXX-XXXX
Volume label (11 characters, ENTER for none)?
```

• **Press** ↵
Since there is currently a label, DOS asks you if you want to delete the label.

```
Delete current volume label (Y/N)? Y
```

• **Press** Y ↵

```
A:\>
```

• **Type** VOL ↵
DOS reports that the disk in drive A: has no label.

```
Volume in drive A has no label
Volume Serial Number is XXXX-XXXX
```

4 **Create the floppy disk's original label:**

• **Type** LABEL LEARNING ↵
NOTE: Since drive A: is current, you do not need to put A: in the command even though we did in step 2.

```
A:\>
```

• **Type** VOL ↵

```
Volume in drive A is LEARNING
Volume Serial Number is XXXX-XXXX
```

5 • **Go on** to Exercise 43
or **take** the disk out of drive A: and turn the computer off.

EXERCISE 43

Practice

LESSON FOUR
Other Useful DOS Commands

OBJECTIVE:

- review the following tasks from the exercises in Lesson Four:

  FASTHELP (DOS 6)
  HELP (DOS 5)
  CHKDSK
  Find files
  Cancel a command
  Repeat a command
  Repeat a command and add to it
  Correct a command:
    replace a character
    insert a character
    delete a character
  Run a program
  DATE
  TIME
  VOL
  LABEL

The COMMANDS to perform each step are listed in Appendix I. Try to complete the exercise without looking at the Appendix for help.

❶ If necessary, **access** the DUPLICATE Learning Disk on drive A: and **change** to this common DOS prompt: `A:\>`

❷
- **Issue** the DIR command with *switches* to **show** files in subdirectories and **pause** after each screenful—display only the first screenful.
  DOS displays the first screenful and prompts you to "Press any key to continue . . ."
- **Cancel** the command.

```
Press any key to continue . . .
^C

A:\>
```

❸ **Display** information about the REN command quickly (DOS 6 users use FASTHELP; DOS 5 users use HELP).

```
Renames a file or files.
RENAME [drive:][path]filename1 filename2
REN [drive:][path]filename1 filename2
Note that you cannot specify a new drive or path for your destination file.
```

❹ **Check** the DUPLICATE Learning Disk.

DOS gives you a report similar to the one shown in Exercise 33, step 2.

❺ **Type** `DIR \PROGRAMS\DATA\*.DOC` ↵

```
REPORT   DOC          10 05-25-93    9:30p
SCRIPT   DOC          10 05-25-93    9:30p
AGENDA   DOC          10 05-25-93    9:32p
       3 file(s)             30 bytes
                      XXXXXX bytes free
```

❻ **Quickly repeat** the command in step 5 (result will match the one above).

❼ **Find** the MUSIC.DB file.

```
Directory of A:\PROGRAMS\DATA
MUSIC    DB            8 05-25-93    9:29p
       1 file(s)              8 bytes
Total files listed:
       1 file(s)              8 bytes
                      XXXXXX bytes free
```

❽ **Find** all the files that end with .GAM on the disk.

```
 Volume in drive A is LEARNING
 Volume Serial Number is XXXX-XXXX
Directory of A:\
CLUE     GAM           8 05-02-93    8:17p
TRIVIA   GAM          10 05-02-93    8:21p
OLDMAID  GAM          11 05-02-93    8:23p
       3 file(s)             29 bytes
Directory of A:\GAMES
ASTRO    GAM           9 05-02-93    8:48p
CHESS    GAM           9 05-02-93    8:48p
JEOPARDY GAM          12 05-02-93    8:49p
       3 file(s)             30 bytes
Total files listed:
       6 file(s)             59 bytes
                      XXXXXX bytes free
```

Exercise 43 continued...

9. Repeat the previous command and add to it so that the output will be printed:
   - **Be sure** the printer is turned on and ready to receive data.
   - **Quickly repeat** the command in step 8. Do not press enter yet.

```
DIR *.GAM /S
```

   - **Type** >PRN ↵
   - **Force** the printer to eject the paper.
     The result will match the result in step 8.

10. **Type** DIR MELLO.DES

```
File not found
```

11. **Correct** the command in step 10 to DIR JELLO.DES without retyping it.

```
JELLO    DES          9 05-02-93    8:23p
       1 file(s)              9 bytes
                        XXXXXX bytes free
```

12. **Type** DIR MITH.MEM ↵

```
File not found
```

13. **Correct** the command in step 12 to SMITH.MEM without retyping it.

```
SMITH    MEM          9 05-02-93    8:20p
       1 file(s)              9 bytes
                        XXXXXX bytes free
```

14. **Type** DIRF TRIVIA.GAM ↵

```
Bad command or file name
```

15. **Correct** the command in step 14 to DIR TRIVIA.GAM without retyping it.

```
TRIVIA   GAM         10 05-02-93    8:21p
       1 file(s)             10 bytes
                        XXXXXX bytes free
```

16. Run a program:
   - **Change** to the PROGRAMS directory.

```
A:\PROGRAMS>
```

   - **Run** the SS.EXE file.

```
                    * * * Spreadsheet Program * * *

If this was a real spreadsheet program

you would use it to:

    * Type in numbers to be calculated.
    * Type formulas to specify how the numbers will be calculated.
    * Save your spreadsheets to disk files.
    * Print your spreadsheets.

Press <Enter> to exit this program ?
```

   - **Change** back to the root directory.

```
A:\>
```

17. **Display** the computer's date.

```
Current date is Day mm-dd-yyyy
Enter new date (mm-dd-yy):

A:\>
```

Exercise 43 continued...

18 **Display** the computer's time.

```
Current time is  hh:mm:ss:xxa|p
Enter new time:

A:\>
```

19 **Display** the *volume label* for the DUPLICATE Learning Disk.

```
Volume in drive A is LEARNING
Volume Serial Number is XXXX-XXXX
```

20 **Display** the *volume label* for the *hard disk*.

```
Volume in drive C is xxxxxxxxxxx
Volume Serial Number is XXXX-XXXX
```

21 **Change** the *volume label* of the disk in drive A: to DATADISK #3.

22 **Display** the *volume label* for the disk in drive A:.

```
Volume in drive A is DATADISK #3
Volume Serial Number is XXXX-XXXX
```

23 **Change** the *volume label* of the disk in drive A: back to LEARNING.

24 **Display** the *volume label* for the disk in drive A:.

```
Volume in drive A is LEARNING
Volume Serial Number is XXXX-XXXX
```

25 **Go on** to Worksheet 15.
If desired, **take** the disk out of drive A: and turn the computer off.

WORKSHEET 15

NAME _____

TOPIC 11 and EXERCISES 30, 31, 32, 33 and 34

DIRECTIONS: Use the following terms to fill in the blanks below. One answer is used more than once.

switch	Find files	command parts	four small command parts
HELP	DOS command	source parameter	subdirectory switch (/S)
CHKDSK	command name	destination parameter	three main command parts
parameter	FASTHELP	bad sectors	hidden files

1. DOS 5 only: Provides information about DOS commands. 1. _____
2. DOS 6 only: Provides "fast" information about DOS commands. 2. _____
3. States the action you want DOS to carry out. 3. _____
4. Defines the object you want DOS to act on. 4. _____
5. Modifies the way a command performs a task. 5. _____
6. Instructions that tell DOS to perform a task. 6. _____
7. Gives you information about your disk and your computer's memory. 7. _____
8. Locate files when you know the filenames but do not know what directory they are in. 8. _____
9. Defines the location to which the data specified by the *source parameter* is to be transferred. 9. _____
10. The switch that tells DOS to look in the *current directory* and every directory under the *current directory* when it lists files. 10. _____
11. Command name, parameters, switches, spaces, slashes, backslashes, and colons. 11. _____
12. Defines the location of data to be transferred to a specified *destination*. 12. _____
13. Command name, parameters, and switches. 13. _____
14. Space, colon, slash, and backslash. 14. _____
15. DOS 6 only: Starts the Help program. 15. _____
16. Files that are given the hidden attribute. 16. _____
17. Areas on a disk that DOS marks as unusable when the disk is formatted. 17. _____

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WORKSHEET 16

NAME _____

EXERCISES 35, 36, 37, 38, 39, 40, 41 and 42

DIRECTIONS: Use the following terms to fill in the blanks below.

TIME	volume label	date parameters	batch file	Cancel a command
DATE	serial number	volume	Run a program	Correct a command
LABEL	VOL (volume)	time parameters	program	Repeat a command

1. The objects DOS acts on in the *time command*. 1. _____
2. Displays the disks volume label and serial number, if they exist. 2. _____
3. Use F1 to repeat the previous command—one character at a time—and replace, insert, or delete one or more characters. 3. _____
4. Displays or changes the computer's date. 4. _____
5. The objects DOS acts on in the *date command*. 5. _____
6. A number that DOS assigns to a disk when it is formatted. 6. _____
7. A term used by DOS to represent a disk when giving it a name (label). 7. _____
8. Creates, changes, or removes a disk's name (volume label). 8. _____
9. Stop DOS from completing a command. 9. _____
10. Use F3 to quickly reproduce the previous DOS command. 10. _____
11. A name you assign to a disk. 11. _____
12. Displays or sets the computer's time. 12. _____
13. A file that contains a list of DOS commands that DOS carries out as a set when you run it. They are saved with a .BAT filename extension. 13. _____
14. A set of instructions that your computer carries out to perform a specific task, such as word processing. 14. _____
15. Load a program into the computer's memory and start it. 15. _____

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WORKSHEET 17

NAME _____

TOPIC 11, Questions

1. What are the three main parts of DOS commands?

   1. 1) _____
      2) _____
      3) _____

2. Which main command part *defines* the *object* you want DOS to act on? 2. _____

3. Which main command part *states* the *action* you want DOS to carry out? 3. _____

4. Which main command part *modifies* the *way a command performs* a task? 4. _____

5. Which main command part is *usually optional*? 5. _____

6. Which main command part is *sometimes required* and *sometimes optional*? 6. _____

7. Which main command part is *always* required? 7. _____

8. List the four *small* DOS command parts.

   8. 1) _____
      2) _____
      3) _____
      4) _____

9. Which *small* command part represents the *root* directory? 9. _____

10. Which *small* command part always follows a *drive letter*? 10. _____

11. Which *small* command part is sometimes, but not always, used to separate *main* command parts? 11. _____

12. Which *small* command part is used to separate *multiple directories in a path*? 12. _____

13. Which *small* command part comes before a *switch*? 13. _____

14. Which *small* command part comes before a *switch* <u>*option*</u>? 14. _____

15. Which *small* command part is used to separate the *last directory in a path from the filename*? 15. _____

16. What kind of parameter defines the location to which the data specified by the source parameter is to be transferred. 16. _____

17. What kind of parameter defines the location of data to be transferred to a specified destination? 17. _____

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WORKSHEET 18

NAME _____

LESSON FOUR, Questions and Commands

1. What DOS command provides information about DOS commands? 1. _____

2. What DOS command gives you information about your disk and the computer's memory? 2. _____

3. How do you stop DOS from completing a command? 3. _____

4. What switch do you use with DIR to make DOS search every directory on a disk? 4. _____

5. What function key repeats the previous DOS command? 5. _____

6. What function key repeats the previous DOS command one character at a time so you can correct mistakes or make changes in a command? 6. _____

WHAT IS THE COMMAND (OR SPECIAL KEYS USED) TO:

7. Display a list of DOS commands with short definitions. 7. _____

8. Get information about the COPY command. 8. _____

9. Check the disk on drive A:. 9. _____

10. Find the file named MEMBER.DB. 10. _____

11. Find all the files that end with .EXE on a disk. 11. _____

12. Stop DOS from completing a command (cancel a command). 12. _____

13. Repeat a command. 13. _____

14. Correct a command. 14. _____

15. Display the computer's date (include ENTERs). 15. _____

16. Change the computer's date to August 5, 1998 (include ENTERs). 16. _____

17. Display the computer's time (include ENTERs). 17. _____

18. Change the computer's time to 11:15 am (include ENTERs). 18. _____

19. Display the *volume label* on the disk in the *current* drive. 19. _____

20. Display the *volume label* on drive C:. 20. _____

21. Change the name of the disk in the *current* drive to MYDISK. 21. _____

22. Run a program named FUN.EXE that is in the current directory. 22. _____

23. Run a "batch" program named CHANGE.BAT that is in the subdirectory PROGS. 23. _____

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Lesson Five
Organizing Files

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TOPIC 12
Organize files

Use filenames, filename extensions, and directories to arrange your files.

OBJECTIVES:

- identify two methods used to organize files
- identify the different ways filenames are used to group files on the Learning Disk
- identify why directories are important for grouping files on the hard disk
- identify how directories are used to group files on the Learning Disk

– Terms and Notes –

filename
The name you assign to a collection of data that you store on a disk.

filename extension
The optional "period and up to three characters" at the end of a filename.

What does file organization involve?

Organizing files involves grouping files in some order that makes sense to you. Files are organized using two techniques:

- creating a **file naming** system that allows you to *group* files, with special attention to **filename extensions**, and
- creating a **directory** system to hold groups of files, that is, a **directory structure**.

Organizing files using filenames

The name you give your files should describe the contents of the files, and beyond that, it is worth taking time to design a file naming system that helps you *group* files. As you have seen in past lessons, *filename extensions* are especially useful for helping you to work with *groups* of files when using certain DOS commands, such as DIR, COPY, DEL, and REN.

Most of the *files* on the Learning Disk have *filename extensions* that give you a clue about the kind of files they are. For example:

files ending with	*are*
.DES	dessert files
.VEG	vegetable files
.GAM	game files
.LET	letter files
.MEM	memo files
.RPT	report files
.EXE	execution files
.BAT	batch files
.DAT	data files used by *batch* files
.DB	database data files
.WK	spreadsheet data files
.DOC	word processing data files

Some *files* on the Learning Disk can be grouped using either the first part of the *filename* or the *filename extension*. For example:

organized by first part of filename	*OR*	*organized by filename extension*
SMITH.LET		SMITH.**LET**
SMITH.MEM		JONES.**LET**
SMITH.RPT		LOPEZ.**LET**
JONES.LET		SMITH.**MEM**
JONES.MEM		JONES.**MEM**
JONES.RPT		LOPEZ.**MEM**
LOPEZ.LET		SMITH.**RPT**
LOPEZ.MEM		JONES.**RPT**
LOPEZ.RPT		LOPEZ.**RPT**

Some *files* on the Learning Disk have no *filename extension*, but can still be grouped. For example,

LETTER1	MEMO1	REPORT1
LETTER2	MEMO2	REPORT2
LETTER3	MEMO3	REPORT3

Some *files* on the Learning Disk cannot be grouped in a meaningful way by using their filenames. However, they can be organized (or grouped) by placing them in a separate directory. For example:

HELLO
HURRAH
NOT

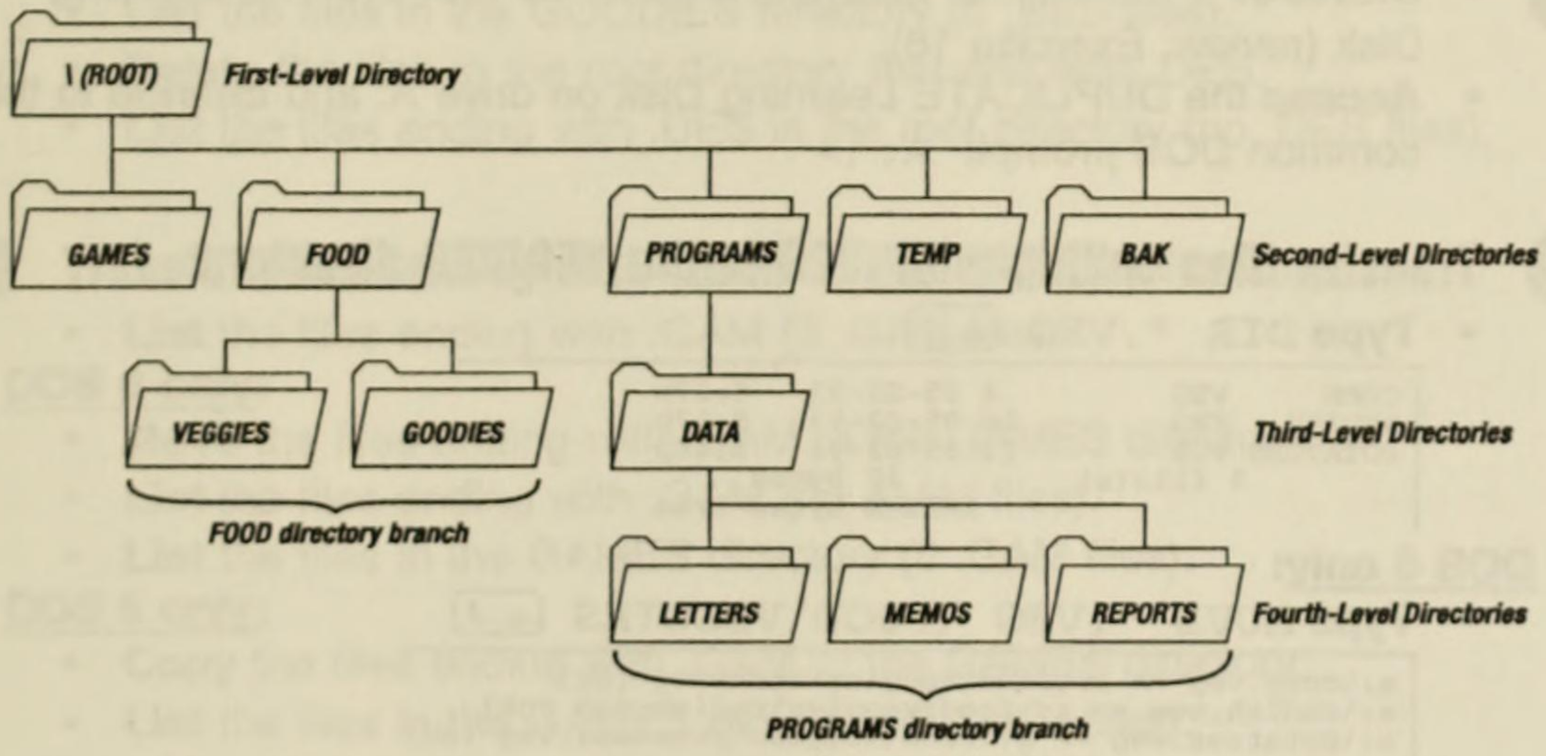
Topic 12 continued...

Organizing files using directories

Directories are very useful for organizing files, especially on the hard disk because of the hard disk's large capacity. While you can organize files on floppy disks by using *different disks* for *different subjects*, it is sometimes useful to use directories on floppy disks too.

At the heart of organizing files is the *directory structure.* You can see that the *directory structure* below provides a certain organization for the files on the Learning Disk:

- **game files** go in the GAMES directory
- **food files** go in the VEGGIES and GOODIES directories in the FOOD branch
- **program files** go in the PROGRAMS directory
- **data files** go in the DATA directory in the PROGRAMS branch
- **letter files** go in the LETTERS directory
- **memo files** go in the MEMOS directory
- **report files** go in the REPORTS directory
- **backup files** go in the BAK directory
- **temporary files** go in the TEMP directory



Working with files and directories in the directory structure

It seems to be less confusing and you are less likely to make mistakes when you make the directory that holds the files you are working with *current*, that is, you *CD* to the directory that holds the files. Always be aware of where you are (where the *current* directory is) within the directory structure.

As you become more familiar and comfortable with DOS, you may want to perform more DOS commands from outside the directories that hold the files you are working with.

What path do you use in your commands?

The **path** (along with files) is the *part* of your *command* that **defines the object you want DOS to act on** (it is a parameter; see Topic 11, page 80).

What you enter as a **path** depends on what directory is *current* and where the directory that you want to access is in relation to the *current* directory.

with the path, you direct DOS	using
- to a subdirectory	the name of the subdirectory
- to the root directory	\
- to a different directory branch	\ and the path *from the root directory*
- down more than one directory level	the path *from the current directory*

NOTE: In any situation, you can use the entire path to a directory — starting from the root (\) directory. Although you may have to do a little extra typing, you may find it less confusing to use the entire path. Generally, this book instructs you to use the most direct path.

Topic 12 (continued)
Organize files

directory
The part of the disk structure that holds files that are stored on a disk. Directories can also hold other directories (sometimes called subdirectories).

directory structure
The organization of directories on a disk. Also called directory tree.

directory levels
The layers of directory levels, starting with the root directory as level one.

directory branch
A directory and all the levels of directories that are under it.

path
The list of directories that DOS goes through to find a file or directory.

current directory
The directory you are working from.

EXERCISE 44

Empty the root directory

Transfer all files from the root directory to other directories.

OBJECTIVES:

- transfer all the .VEG files to the VEGGIES directory
- transfer all the .DES files to the GOODIES directory
- transfer all the .GAM files to the GAMES directory
- transfer all the remaining files to the DATA directory

– Terms and Notes –

transfer files
To move files from one directory to another directory so that the files are removed from the original directory.
DOS 6 users may use the MOVE command to complete the transfer in one step, while DOS 5 users must first use COPY and then DEL to complete the transfer.

NOTE: It is a good idea to use the DIR command to *list* the contents of the directories that files are being *transferred* to and from.

STEPS to

Transfer files from one directory to another directory

DOS 6 users:

1 **List** the files to be transferred.
2 **Move** the files to the receiving directory.
3 **List** the files in the receiving directory.
4 **List** the files in the original directory (you will get a *Files not found* message).

DOS 5 users:

1 **List** the files to be transferred.
2 **Copy** the files to the receiving directory.
3 **List** the files in the receiving directory.
4 **Delete** the files in the original directory.
5 **List** the files in the original directory (you will get a *Files not found* message).

Complete Lesson Five before proceeding in this book

You must complete the exercises in Lesson Five, including the practice exercise, in order to obtain the expected results in the remaining lessons. If you have problems, DISKCOPY the original Learning Disk to the Duplicate Learning Disk and redo this lesson. Appendix L summarizes this lesson.

Imitate the hard disk

In this exercise you will use the floppy disk in drive A: as an imitation mini hard disk environment. On the hard disk, it is a good practice to keep only *directories* and a few *system files* in *root* directory, and to store all *data files* and *program files* in directories other than the root directory.

You will **transfer** all the files on the *root* directory on the DUPLICATE Learning Disk to other appropriate directories. To *transfer* files, DOS 6 users will use the MOVE command, while DOS 5 users will use the COPY and DEL commands. All commands used in this exercise have been covered in previous exercises.

1

- **DISKCOPY** the original Learning Disk to the DUPLICATE Learning Disk (review, Exercise 18).
- **Access** the DUPLICATE Learning Disk on drive A: and **change** to this common DOS prompt: `A:\>`

2 **Transfer files ending with .VEG to the VEGGIES directory:**

- **Type** `DIR *.VEG` ↵

```
CORN      VEG          8 05-02-93    8:17p
RADISH    VEG         10 05-02-93    8:17p
POTATOES  VEG         12 05-02-93    8:18p
        3 file(s)             30 bytes
                     XXXXXX bytes free
```

DOS 6 only:

- **Type** `MOVE *.VEG \FOOD\VEGGIES` ↵

```
a:\corn.veg => a:\food\veggies\corn.veg [ok]
a:\radish.veg => a:\food\veggies\radish.veg [ok]
a:\potatoes.veg => a:\food\veggies\potatoes.veg [ok]
```

- **Type** `DIR \FOOD\VEGGIES` ↵

```
 Directory of A:\FOOD\VEGGIES

.            <DIR>      05-02-93    8:27p
..           <DIR>      05-02-93    8:27p
CABBAGE   VEG          11 05-02-93    8:47p
CARROTS   VEG          11 05-02-93    8:47p
KALE      VEG           8 05-02-93    8:47p
LETTUCE   VEG          11 05-02-93    8:47p
CELERY    VEG          10 05-02-93    8:48p
CORN      VEG           8 05-02-93    8:17p
RADISH    VEG          10 05-02-93    8:17p
POTATOES  VEG          12 05-02-93    8:18p
       10 file(s)             81 bytes
                     XXXXXX bytes free
```

- **Type** `DIR *.VEG` ↵

```
File not found
```

DOS 5 only:

- **Type** `COPY *.VEG \FOOD\VEGGIES` ↵

```
CORN.VEG
RADISH.VEG
POTATOES.VEG
        3 file(s) copied
```

- **Type** `DIR \FOOD\VEGGIES` ↵

NOTE: Be sure all the files are copied before deleting them from the root directory.

```
 Directory of A:\FOOD\VEGGIES

.            <DIR>      05-02-93    8:27p
..           <DIR>      05-02-93    8:27p
CABBAGE   VEG          11 05-02-93    8:47p
CARROTS   VEG          11 05-02-93    8:47p
KALE      VEG           8 05-02-93    8:47p
LETTUCE   VEG          11 05-02-93    8:47p
CELERY    VEG          10 05-02-93    8:48p
CORN      VEG           8 05-02-93    8:17p
RADISH    VEG          10 05-02-93    8:17p
POTATOES  VEG          12 05-02-93    8:18p
       10 file(s)             81 bytes
                     XXXXXX bytes free
```

Exercise 44 continued...

DOS 5 only: (continued)

- **Type** DEL *.VEG ↵
- **Type** DIR *.VEG ↵

```
File not found
```

❸ Transfer files ending with .DES to the GOODIES directory:

NOTE: These instructions are less exact than those in step 2. Please refer back to step 2 if you need help in completing this step. Solutions for steps 3, 4, and 5 are in Appendix H.

- **List** the files ending with .DES (2 .DES files).

DOS 6 only:

- **Move** the files ending with .DES to the GOODIES directory.
- **List** the files ending with .DES (no .DES files).
- **List** the files in the GOODIES directory (6 .DES files).

DOS 5 only:

- **Copy** the files ending with .DES to the GOODIES directory.
- **List** the files in the GOODIES directory (6 .DES files).
- **Delete** the files in the root directory that end with .DES.
- **List** the files ending with .DES in the root directory (no .DES files).

❹ Transfer files ending with .GAM to the GAMES directory:

- **List** the files ending with .GAM (3 .GAM files).

DOS 6 only:

- **Move** the files ending with .GAM to the GAMES directory.
- **List** the files ending with .GAM (no .GAM files).
- **List** the files in the GAMES directory (6 .GAM files).

DOS 5 only:

- **Copy** the files ending with .GAM to the GAMES directory.
- **List** the files in the GAMES directory (6 .GAM files).
- **Delete** the files in the root directory that end with .GAM.
- **List** the files ending with .GAM in the root directory (no .GAM files).

❺ Transfer all the remaining files to the DATA directory:

- **List** the files in the root directory (DIR).

DOS 6 only:

- **Move** all the files to the DATA directory.
  (MOVE *.* \PROGRAMS\DATA)
- **List** the files in the DATA directory (30 files – 32 including directories).

DOS 5 only:

- **Copy** all the files to the DATA directory.
  (COPY *.* \PROGRAMS\DATA)
- **List** the files in the DATA directory (30 files – 32 including directories).
- **Delete** all the files on the DATA directory.
  (DEL *.* — DOS asks if you are sure? — Type Y)

DOS 6 *and* DOS 5:

- **List** the contents of the root directory.

DOS displays 4 directories, but no files—even though it reports "4 file(s)" (remember that DOS counts directories and files together when it reports the number of file(s)).

```
 Directory of A:\

GAMES          <DIR>      05-02-93   7:46p
FOOD           <DIR>      05-02-93   7:46p
PROGRAMS       <DIR>      05-22-93   8:41p
BAK            <DIR>      05-22-93   8:43p
        4 file(s)                0 bytes
                          XXXXXX bytes free
```

Exercise 44 continued...

Exercise 44 (continued)
Empty the root directory

WARNING: DO NOT EMPTY THE *ROOT* DIRECTORY ON DRIVE C: OF ALL FILES. Certain system files are essential on the hard disk, and moving them can make your computer system unusable.

NOTE: When transferring files, a good rule to follow is: if you do not know the purpose of a file, do not *move* or *delete* it.

directory structure for Exercise 44

```
A:.
├─GAMES
├─FOOD
│  ├─VEGGIES
│  └─GOODIES
├─PROGRAMS
│  └─DATA
└─BAK
```

summary of files transferred in Exercise 44

files transferred	*from directory*	*to directory*
*.VEG	root	VEGGIES
*.DES	root	GOODIES
*.GAM	root	GAMES
.	root	DATA

Exercise 44 (continued)
Empty the root directory

6 **Print a list showing all files on the disk:**

- **Type** `DIR /S>PRN` ↵
  The first page is ejected.
- **Force** the printer to eject the second page.

Page breaks may vary.

```
 Volume in drive A is LEARNING
 Volume Serial Number is XXXX-XXXX

Directory of A:\

GAMES        <DIR>      05-02-93   7:46p
FOOD         <DIR>      05-02-93   7:46p
PROGRAMS     <DIR>      05-22-93   8:41p
BAK          <DIR>      05-22-93   8:43p
       4 file(s)              0 bytes

Directory of A:\BAK

.            <DIR>      05-22-93   8:43p
..           <DIR>      05-22-93   8:43p
       2 file(s)              0 bytes

Directory of A:\FOOD

.            <DIR>      05-02-93   7:46p
..           <DIR>      05-02-93   7:46p
VEGGIES      <DIR>      05-02-93   8:27p
GOODIES      <DIR>      05-02-93   8:28p
       4 file(s)              0 bytes

Directory of A:\FOOD\GOODIES

.            <DIR>      05-02-93   8:28p
..           <DIR>      05-02-93   8:28p
CAKE     DES         8 05-02-93   8:45p
COOKIES  DES        11 05-02-93   8:46p
ICECREAM DES        12 05-02-93   8:46p
PIE      DES         7 05-02-93   8:46p
PUDDING  DES        11 05-02-93   8:19p
JELLO    DES         9 05-02-93   8:23p
       8 file(s)             58 bytes

Directory of A:\FOOD\VEGGIES

.            <DIR>      05-02-93   8:27p
..           <DIR>      05-02-93   8:27p
CABBAGE  VEG        11 05-02-93   8:47p
CARROTS  VEG        11 05-02-93   8:47p
KALE     VEG         8 05-02-93   8:47p
LETTUCE  VEG        11 05-02-93   8:47p
CELERY   VEG        10 05-02-93   8:48p
CORN     VEG         8 05-02-93   8:17p
RADISH   VEG        10 05-02-93   8:17p
POTATOES VEG        12 05-02-93   8:18p
      10 file(s)             81 bytes

Directory of A:\GAMES

.            <DIR>      05-02-93   7:46p
..           <DIR>      05-02-93   7:46p
ASTRO    GAM         9 05-02-93   8:48p
CHESS    GAM         9 05-02-93   8:48p
JEOPARDY GAM        12 05-02-93   8:49p
CLUE     GAM         8 05-02-93   8:17p
TRIVIA   GAM        10 05-02-93   8:21p
OLDMAID  GAM        11 05-02-93   8:23p
       8 file(s)              59 bytes
```

```
Directory of A:\PROGRAMS

.            <DIR>      05-22-93   8:41p
..           <DIR>      05-22-93   8:41p
CLS      DAT           290 04-22-93   4:05p
OPENING  DAT           319 04-22-93   4:05p
CD       DAT           479 04-22-93   3:57p
SHOWME   BAT           139 04-22-93   3:59p
DB       EXE         31458 04-22-93   3:21p
SS       EXE         31374 04-22-93   3:06p
WP       EXE         31426 04-22-93   3:10p
DATA         <DIR>      05-22-93   8:43p
      10 file(s)          95485 bytes

Directory of A:\PROGRAMS\DATA

.            <DIR>      05-22-93   8:43p
..           <DIR>      05-22-93   8:43p
MEMBER   DB            9 05-25-93   9:28p
CLUB     DB            7 05-25-93   9:29p
MUSIC    DB            8 05-25-93   9:29p
REPORT   DOC          10 05-25-93   9:30p
SCRIPT   DOC          10 05-25-93   9:30p
PAYROLL  WK           10 05-25-93   9:31p
SALES    WK            8 05-25-93   9:31p
AGENDA   DOC          10 05-25-93   9:32p
GRADES   WK            9 05-25-93   9:32p
JONES    LET           9 05-02-93   7:48p
SMITH    LET           9 05-02-93   8:13p
LOPEZ    LET           9 05-02-93   8:13p
LETTER1                7 05-02-93   8:15p
REPORT3                7 05-02-93   8:16p
LETTER2                7 05-02-93   8:16p
LOPEZ    RPT           9 05-02-93   8:19p
REPORT1                7 05-02-93   8:20p
SMITH    RPT           9 05-02-93   8:20p
SMITH    MEM           9 05-02-93   8:20p
MEMO3                  5 05-02-93   8:21p
LOPEZ    MEM           9 05-02-93   8:21p
LETTER3                7 05-02-93   8:22p
JONES    MEM           9 05-02-93   8:22p
JONES    RPT           9 05-02-93   8:23p
MEMO1                  5 05-02-93   8:24p
MEMO2                  5 05-02-93   8:24p
REPORT2                7 05-02-93   8:25p
HELLO                 99 05-25-93   9:36p
HURRAH                54 05-02-93   8:40p
NOT                   60 05-25-93   9:37p
      32 file(s)           432 bytes

Total files listed:
      78 file(s)         96115 bytes
                        XXXXXX bytes free
```

7 • **Go on** to Exercise 45
or take the disk out of drive A: and turn the computer off.

❶ • If necessary, **access** the DUPLICATE Learning Disk on drive A: and **change** to this common DOS prompt: `A:\>`

❷ Make new directories in the root directory:

• **Type** `MD TEMP` ↵

DOS works a little and then, without reporting success, displays a new prompt.

```
A:\>
```

• **List** the contents of the directory to see if the TEMP directory is there.

DOS created the file in the first unused space it found—where JONES.LET used to be.

```
 Directory of A:\

GAMES          <DIR>      05-02-93   7:46p
FOOD           <DIR>      05-02-93   7:46p
PROGRAMS       <DIR>      05-22-93   8:41p
TEMP           <DIR>      XX-XX-XX   X:XXX
BAK            <DIR>      05-22-93   8:43p
       5 file(s)              0 bytes
                         XXXXXX bytes free
```

NOTE: DOS puts the TEMP directory in the first available location—the spot where JONES.LET used to be. This is an opportunity to point out that when this occurs, JONES.LET can no longer be ***recovered*** *(if you are using the default UNDELETE protection level).*

❸ • **Type** `MD NEWDIR` ↵

DOS works a little and displays a new prompt.

```
A:\>
```

• **List** the contents of the *current* (root) directory.

DOS lists the new directory at the bottom of the list of directories.

```
 Directory of A:\

GAMES          <DIR>      05-02-93   7:46p
FOOD           <DIR>      05-02-93   7:46p
PROGRAMS       <DIR>      05-22-93   8:41p
TEMP           <DIR>      XX-XX-XX   X:XXX
BAK            <DIR>      05-22-93   8:43p
NEWDIR         <DIR>      XX-XX-XX   X:XXX
       6 file(s)              0 bytes
                         XXXXXX bytes free
```

❹ Make new directories in a different directory:

(make three directories in the DATA directory)

• **Type** `CD \PROGRAMS\DATA` ↵
(to change to the DATA directory)

```
A:\PROGRAMS\DATA>
```

• **Type** `MD LETTERS` ↵

• **Type** `MD MEMOS` ↵

• **Type** `MD REPORTS` ↵

• **List** the contents of the *current* (DATA) directory.

DOS lists the three new directories at the bottom of the list of files in the DATA directory.

```
HURRAH                 54 05-02-93   8:40p
NOT                    60 05-25-93   9:37p
LETTERS        <DIR>      XX-XX-XX   X:XXX
MEMOS          <DIR>      XX-XX-XX   X:XXX
REPORTS        <DIR>      XX-XX-XX   X:XXX
      35 file(s)            432 bytes
                         XXXXXX bytes free
```

• **Change** to the *root* directory.

```
A:\>
```

❺ • **Go on** to Exercise 46
or **take** the disk out of drive A: and turn the computer off.

EXERCISE 45

MD (make directory)

Creates a directory.

OBJECTIVES:

- make directories in the *root* directory
- make directories in the DATA directory
- use DIR to list the new directories

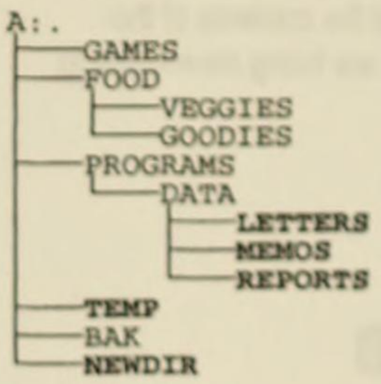
- Terms and Notes -

NOTE: MD is an abbreviation of the DOS command MKDIR, which works just like MD.

rules for directory names

- the directory name can be up to 8 characters
- you **cannot** use these characters:
  `. " / \ [ ] " * | < > + = ; , ?`
- you **cannot** use a space
- you **can** use an extension of a period and up to three characters

Directory structure at the end of Exercise 45
(new directories are bolded)



STEPS to

Create a directory below the current directory

1 **Change** to the directory you want to create a new directory in.
2 **Type** `MD`
3 **Press** Space
4 **Type** the directory's name
5 **Press** ↵

EXERCISE 46

Transfer files

Move files from one directory to another directory and remove the files from the original directory.

OBJECTIVES:

- display the new directory structure
- transfer *letter files* from the DATA directory to the LETTERS directory
- transfer *memo files* from the DATA directory to the MEMOS directory
- transfer *report files* from the DATA directory to the REPORTS directory
- copy files to a new directory
- create a new directory
- transfer files into a new directory

– Terms and Notes –

NOTE: DOS 6 users can use the MOVE command to complete the transfer in one step, while DOS 5 users must first COPY and then DEL the files to complete the transfer.

NOTE: It is always a good idea to use the DIR command to *list* the contents of the directories that files are being *transferred* to and from.

STEPS to

Transfer files

DOS 6 users:

1 **List** the files to be transferred.
2 **Move** the files to the receiving directory.
3 **List** the files in the receiving directory.
4 **List** the files in the original directory (you will get a *Files not found* message).

DOS 5 users:

1 **List** the files to be transferred.
2 **Copy** the files to the receiving directory.
3 **List** the files in the receiving directory.
4 **Delete** the files in the original directory.
5 **List** the files in the original directory (you will get a *Files not found* message).

Transferring files is serious

It is not hard to accidentally transfer files to the wrong place. In this exercise, you are instructed to work in the DATA directory. The directories you are transferring files to (LETTERS, MEMOS, and REPORTS) are all subdirectories of the DATA directory. When you transfer files to a subdirectory, you can name the *directory* you are copying or moving files to without listing the entire *path* to the directory. However, you are less likely to misdirect files if you use the entire path to a directory (from the root) when directing DOS where to send your files. For example, to copy files ending with .LET from the DATA directory to the LETTERS subdirectory, you can type either:

```
COPY *.LET LETTERS                    ←quicker
COPY *.LET \PROGRAMS\DATA\LETTERS     ←safer
```

1

- If necessary, **access** the DUPLICATE Learning Disk on drive A: and **change** to this common DOS prompt: `A:\>`

2 Display the new directory structure:

- **Type** `TREE` ↵

```
A:.
├─GAMES
├─FOOD
│  ├─VEGGIES
│  └─GOODIES
├─PROGRAMS
│  └─DATA
│     ├─LETTERS  ←
│     ├─MEMOS    ← subdirectories of DATA
│     └─REPORTS  ←
├─TEMP     ← subdirectory of root
├─BAK
└─NEWDIR   ← subdirectory of root
```

3 Transfer letter files from DATA directory to LETTERS directory:

(the *letter* files either end with .LET or begin with LETTER)

NOTE: To transfer files, DOS 6 users may use the MOVE command, while DOS 5 users must use COPY and DEL.

- **Type** `CD \PROGRAMS\DATA` ↵

```
A:\PROGRAMS\DATA>
```

- **Type** `DIR *.LET` ↵

```
 Directory of A:\PROGRAMS\DATA
JONES    LET          9 05-02-93   7:48p
SMITH    LET          9 05-02-93   8:13p
LOPEZ    LET          9 05-02-93   8:13p
       3 file(s)             27 bytes
                      XXXXXX bytes free
```

- **Type** `DIR LETTER?` ↵

```
 Directory of A:\PROGRAMS\DATA
LETTER1              7 05-02-93   8:15p
LETTER2              7 05-02-93   8:16p
LETTER3              7 05-02-93   8:22p
LETTERS      <DIR>     XX-XX-XX   X:XXX
       4 file(s)             21 bytes
                      XXXXXX bytes free
```

DOS 6 only:

- **Type** `MOVE *.LET LETTERS` ↵
  DOS reports each file moved with an [ok] at the end of the line.
- **Type** `MOVE LETTER? LETTERS` ↵
  DOS reports each file moved with an [ok] at the end of the line. DOS also tried to "move" the LETTERS directory and reported that it was [Unable to open source].

DOS 5 only:

- **Type** `COPY *.LET LETTERS` ↵
  DOS reports 3 file(s) copied.
- **Type** `COPY LETTER? LETTERS` ↵
  DOS reports 3 file(s) copied.

Exercise 46 continued...

DOS 6 *and* DOS 5:

- **Type** DIR LETTERS ↵

```
 Volume in drive A is LEARNING
 Volume Serial Number is XXXX-XXXX
 Directory of A:\PROGRAMS\DATA\LETTERS

.            <DIR>      XX-XX-XX   X:XXX
..           <DIR>      XX-XX-XX   X:XXX
JONES    LET             9 05-02-93   7:48p
SMITH    LET             9 05-02-93   8:13p
LOPEZ    LET             9 05-02-93   8:13p
LETTER1                  7 05-02-93   8:15p
LETTER2                  7 05-02-93   8:16p
LETTER3                  7 05-02-93   8:22p
        8 file(s)             48 bytes
                         XXXXXX bytes free

A:\PROGRAMS\DATA>
```

DOS 5 only:

- **Type** DEL *.LET ↵
  DOS displays a new DOS prompt, but does not report deleted files.
- **Type** DEL LETTER? ↵
  DOS displays a new DOS prompt, but does not report deleted files.

DOS 6 *and* DOS 5:

- **Type** DIR *.LET ↵

```
File not found
```

- **Type** DIR LETTER? ↵

```
 Directory of A:\PROGRAMS\DATA

LETTERS      <DIR>      XX-XX-XX  XX:XXX
       1 file(s)              0 bytes
                        XXXXXX bytes free
```

❹ Transfer memo files from DATA directory to MEMOS directory:

(the *memo* files either end with .MEM or begin with MEMO)

WARNING: When you "group" files using wildcards, sometimes files you do not want to include in your "group" fit your ***filename pattern****. For example, if you use the* ***filename pattern*** *MEM*.* to group the MEMO files in the DATA directory, the file MEMBER.DB will be included in the group. However, if you use the* ***filename pattern****, MEMO?, only MEMO files will be included in the group. This situation points out why it is a good idea to use the DIR command to check the results of your* ***filename patterns*** *before you COPY, MOVE, or DELete a "group" of files.*

NOTE: These instructions are more general than those in step 3. Use concepts covered in step 3 if you need help completing this step. *Solution in Appendix H.*

The DATA directory should be *current*, and this prompt should still be displayed: A:\PROGRAMS\DATA>

- **List** the files that *end* with .MEM.
- **List** the files that *begin* with MEMO.

DOS 6 only:

- **Move** files that *end* with .MEM to the MEMOS directory.
- **Move** files that *begin* with MEMO to the MEMOS directory.
- **List** the contents of the MEMOS directory.
  DOS lists 6 memo files.

DOS 5 only:

- **Copy** files that *end* with .MEM to the MEMOS directory.
- **Copy** files that *begin* with MEMO to the MEMOS directory.
- **List** the contents of the MEMOS directory.
  DOS lists 6 memo files.
- **Delete** files in the DATA directory that *end* with .MEM.
- **Delete** files in the DATA directory that *begin* with MEMO.

DOS 6 *and* DOS 5:

- **List** the files that *end* with .MEM.
  DOS reports "File not found."
- **List** the files that *begin* with MEMO.
  DOS lists the MEMO directory, but no MEMO files.

summary of files transferred in Exercise 46

files transferred	*from directory*	*to directory*
*.LET	DATA	LETTERS
LETTER?	DATA	LETTERS
*.MEM	DATA	MEMOS
MEMO?	DATA	MEMOS
*.RPT	DATA	REPORTS
REPORT?	DATA	REPORTS
HELLO	DATA	MISC
HURRAH	DATA	MISC
NOT	DATA	MISC

Exercise 46 continued...

Exercise 46 (continued)
Transfer files

IMPORTANT: When you organize files, there may sometimes be a conflict about which *directory* you want to put a particular file in. Such is the case with the file, REPORT.DOC.

Do you put REPORT.DOC in the REPORT directory with other *report* files, or do you put it in the WP directory with other .DOC files (the WP directory will be created in Practice Exercise 52)?

You will be directed to put REPORT.DOC in the WP directory with other .DOC files in Practice Exercise 52.

DIR NOTE: When you use the filename pattern REPORT? with the DIR command, it lists REPORT.DOC along with REPORT1, REPORT2, and REPORT3.

However, when you use that same filename pattern (REPORT?) with the COPY and DEL commands, those commands will not copy or delete the REPORT.DOC file.

If you use the filename pattern REPORT?. (add a period) with the DIR command, it will not list REPORT.DOC with the other REPORT files.

Either filename pattern (REPORT?. or REPORT?) can be used to copy and delete REPORT1, REPORT2, and REPORT3.

❺ Transfer report files (except REPORT.DOC) from DATA directory to REPORTS directory:

(the *report* files either end with .RPT or begin with REPORT, but do not include REPORT.DOC – see WARNING in step 4)

This prompt should still be displayed: A:\PROGRAMS\DATA>

- Use concepts covered in steps 3 and 4 to transfer the "report" files (except REPORT.DOC) from the DATA directory to the REPORTS directory. See DIR note in side column. (Solution in Appendix H.)

❻ Copy files to a new directory:

(copy files that begin with C from GAMES to TEMP)

- **Change** to the *root* directory.

```
A:\>
```

- **Type** COPY \GAMES\C*.* \TEMP ↵

```
GAMES\CHESS.GAM
GAMES\CLUE.GAM
        2 file(s) copied
```

- **Type** DIR \TEMP ↵

```
 Directory of A:\TEMP

.            <DIR>      XX-XX-XX   X:XXX
..           <DIR>      XX-XX-XX   X:XXX
CHESS    GAM            9 05-02-93   8:48p
CLUE     GAM            8 05-02-93   8:17p
        4 file(s)              17 bytes
                       XXXXXX bytes free
```

❼ Create a new directory:

(make a directory named MISC that is a subdirectory of the root directory)

- **Make** a directory; name it MISC (review, Exercise 45).
- **Display** the new directory structure (review, step 2).

```
A:.
    GAMES
    FOOD
        VEGGIES
        GOODIES
    PROGRAMS
        DATA
            LETTERS
            MEMOS
            REPORTS
    TEMP
    BAK
    NEWDIR
    MISC    ← subdirectory of the root directory
```

❽ Transfer files into the new directory:

- **Change** to the DATA directory.

```
A:\PROGRAMS\DATA>
```

- **List** the file in the *current* directory (DATA).
  DOS lists six directories and three files (HELLO, HURRAH, and NOT).

DOS 6 only

- **Type** MOVE HELLO \MISC ↵

DOS 5 only

- **Type** COPY HELLO \MISC ↵
- **Type** DIR \MISC ↵ (HELLO should be listed).
- **Type** DEL HELLO ↵

DOS 6 *and* DOS 5

- **Transfer** the files HURRAH and NOT from DATA to MISC.
  NOTE: Since you are transferring files to a different directory branch, you must type the full path (\MISC). (Solution in Appendix H.)
- **Change** to the MISC directory.

```
A:\MISC>
```

Exercise 46 continued...

DOS 6 and DOS 5: (continued)

- **List** the contents of the directory.

```
 Directory of A:\MISC

.             <DIR>      XX-XX-XX   X:XXX
..            <DIR>      XX-XX-XX   X:XXX
HELLO                99 05-25-93    9:36p
HURRAH               54 05-02-93    8:40p
NOT                  60 05-25-93    9:37p
        5 file(s)          213 bytes
                         XXXXXX bytes free
```

- **Change** to the *root* directory.

```
A:\>
```

9 Print a list showing all files on the disk:

This prompt should be displayed: A:\>

- **Type** `DIR /S>PRN` ↵
  The first page or two are ejected.
- **Force** the printer to eject the remaining page.

Page breaks will vary.

```
 Volume in drive A is LEARNING
 Volume Serial Number is XXXX-XXXX
Directory of A:\

GAMES          <DIR>      05-02-93   7:46p
FOOD           <DIR>      05-02-93   7:46p
PROGRAMS       <DIR>      05-22-93   8:41p
TEMP           <DIR>      XX-XX-XX   X:XXX
BAK            <DIR>      05-22-93   8:43p
NEWDIR         <DIR>      XX-XX-XX   X:XXX
MISC           <DIR>      XX-XX-XX   X:XXX
        7 file(s)              0 bytes
Directory of A:\BAK

.              <DIR>      05-22-93   8:43p
..             <DIR>      05-22-93   8:43p
        2 file(s)              0 bytes
Directory of A:\FOOD

.              <DIR>      05-02-93   7:46p
..             <DIR>      05-02-93   7:46p
VEGGIES        <DIR>      05-02-93   8:27p
GOODIES        <DIR>      05-02-93   8:28p
        4 file(s)              0 bytes
Directory of A:\FOOD\GOODIES

.              <DIR>      05-02-93   8:28p
..             <DIR>      05-02-93   8:28p
CAKE      DES          8 05-02-93   8:45p
COOKIES   DES         11 05-02-93   8:46p
ICECREAM  DES         12 05-02-93   8:46p
PIE       DES          7 05-02-93   8:46p
PUDDING   DES         11 05-02-93   8:19p
JELLO     DES          9 05-02-93   8:23p
        8 file(s)             58 bytes
Directory of A:\FOOD\VEGGIES

.              <DIR>      05-02-93   8:27p
..             <DIR>      05-02-93   8:27p
CABBAGE   VEG         11 05-02-93   8:47p
CARROTS   VEG         11 05-02-93   8:47p
KALE      VEG          8 05-02-93   8:47p
LETTUCE   VEG         11 05-02-93   8:47p
CELERY    VEG         10 05-02-93   8:48p
CORN      VEG          8 05-02-93   8:17p
RADISH    VEG         10 05-02-93   8:17p
POTATOES  VEG         12 05-02-93   8:18p
       10 file(s)             81 bytes
Directory of A:\GAMES

.              <DIR>      05-02-93   7:46p
..             <DIR>      05-02-93   7:46p
ASTRO     GAM          9 05-02-93   8:48p
CHESS     GAM          9 05-02-93   8:48p
JEOPARDY  GAM         12 05-02-93   8:49p
CLUE      GAM          8 05-02-93   8:17p
TRIVIA    GAM         10 05-02-93   8:21p
OLDMAID   GAM         11 05-02-93   8:23p
        8 file(s)             59 bytes
Directory of A:\MISC

.              <DIR>      XX-XX-XX   X:XXX
..             <DIR>      XX-XX-XX   X:XXX
HELLO                99 05-25-93    9:36p
HURRAH               54 05-02-93    8:40p
NOT                  60 05-25-93    9:37p
        5 file(s)          213 bytes
Directory of A:\NEWDIR

.              <DIR>      XX-XX-XX   X:XXX
..             <DIR>      XX-XX-XX   X:XXX
        2 file(s)              0 bytes
```

```
Directory of A:\PROGRAMS

.              <DIR>      05-22-93   8:41p
..             <DIR>      05-22-93   8:41p
CLS       DAT         290 04-22-93   4:05p
OPENING   DAT         319 04-22-93   4:05p
CD        DAT         479 04-22-93   3:57p
SHOWME    BAT         139 04-22-93   3:59p
DB        EXE       31458 04-22-93   3:21p
SS        EXE       31374 04-22-93   3:06p
WP        EXE       31426 04-22-93   3:10p
DATA           <DIR>      05-22-93   8:43p
       10 file(s)         95485 bytes
Directory of A:\PROGRAMS\DATA

.              <DIR>      05-22-93   8:43p
..             <DIR>      05-22-93   8:43p
MEMBER    DB            9 05-25-93   9:28p
CLUB      DB            7 05-25-93   9:29p
MUSIC     DB            8 05-25-93   9:29p
REPORT    DOC          10 05-25-93   9:30p
SCRIPT    DOC          10 05-25-93   9:30p
PAYROLL   WK           10 05-25-93   9:31p
SALES     WK            8 05-25-93   9:31p
AGENDA    DOC          10 05-25-93   9:32p
GRADES    WK            9 05-25-93   9:32p
LETTERS        <DIR>      XX-XX-XX   X:XXX
MEMOS          <DIR>      XX-XX-XX   X:XXX
REPORTS        <DIR>      XX-XX-XX   X:XXX
       14 file(s)             81 bytes
Directory of A:\PROGRAMS\DATA\LETTERS

.              <DIR>      XX-XX-XX   X:XXX
..             <DIR>      XX-XX-XX   X:XXX
JONES     LET           9 05-02-93   7:48p
SMITH     LET           9 05-02-93   8:13p
LOPEZ     LET           9 05-02-93   8:13p
LETTER1                 7 05-02-93   8:15p
LETTER2                 7 05-02-93   8:16p
LETTER3                 7 05-02-93   8:22p
        8 file(s)              48 bytes
Directory of A:\PROGRAMS\DATA\MEMOS

.              <DIR>      XX-XX-XX   X:XXX
..             <DIR>      XX-XX-XX   X:XXX
SMITH     MEM           9 05-02-93   8:20p
LOPEZ     MEM           9 05-02-93   8:21p
JONES     MEM           9 05-02-93   8:22p
MEMO3                   5 05-02-93   8:21p
MEMO1                   5 05-02-93   8:24p
MEMO2                   5 05-02-93   8:24p
        8 file(s)              42 bytes
Directory of A:\PROGRAMS\DATA\REPORTS

.              <DIR>      XX-XX-XX   X:XXX
..             <DIR>      XX-XX-XX   X:XXX
LOPEZ     RPT           9 05-02-93   8:19p
SMITH     RPT           9 05-02-93   8:20p
JONES     RPT           9 05-02-93   8:23p
REPORT3                 7 05-02-93   8:16p
REPORT1                 7 05-02-93   8:20p
REPORT2                 7 05-02-93   8:25p
        8 file(s)              48 bytes
Directory of A:\TEMP

.              <DIR>      XX-XX-XX   X:XXX
..             <DIR>      XX-XX-XX   X:XXX
CHESS     GAM           9 05-02-93   8:48p
CLUE      GAM           8 05-02-93   8:17p
        4 file(s)              17 bytes
Total files listed:
       98 file(s)          96132 bytes
                         XXXXXX bytes free
```

10

- **Go on** to Exercise 47
  or **take** the disk out of drive A: and turn the computer off.

EXERCISE 47

RD (remove directory)

Deletes a directory.

OBJECTIVES:

- identify two conditions under which RD will not work
- remove the NEWDIR directory
- remove the TEMP directory
- make a directory, examine it, and delete it

– Terms and Notes –

NOTE: RD is an abbreviation of the DOS command RMDIR, which works just like RD.

STEPS to

Remove a directory

1 **Change** to the directory you want to delete.
2 **List** the contents of the directory.
3 **Delete** any files and/or directories in the directory (if there are any files in it).
4 **Change** to the parent directory of the directory to be removed.
5 **Type** RD
6 **Press** Space
7 **Type** the directory's name.
8 **Press** ↵

Deleting directories

Two conditions must be met before you can use the RD command to delete a directory:

- the directory must be empty, and
- the directory cannot be current.

❶ • If necessary, **access** the DUPLICATE Learning Disk on drive A: and **change** to this common DOS prompt: `A:\>`

❷ • **List** the contents of the current directory.

```
 Directory of A:\
GAMES          <DIR>      05-02-93   7:46p
FOOD           <DIR>      05-02-93   7:46p
PROGRAMS       <DIR>      05-22-93   8:41p
TEMP           <DIR>      XX-XX-XX   X:XXX
BAK            <DIR>      05-22-93   8:43p
NEWDIR         <DIR>      XX-XX-XX   X:XXX
MISC           <DIR>      XX-XX-XX   X:XXX
        7 file(s)              0 bytes
                           XXXXXX bytes free
```

❸ **Try to remove a directory when the directory is current:**

• **Change** to the NEWDIR directory.

```
A:\NEWDIR>
```

• **List** the contents of the NEWDIR directory.

```
 Directory of A:\NEWDIR
.              <DIR>      XX-XX-XX   X:XXX
..             <DIR>      XX-XX-XX   X:XXX
        2 file(s)              0 bytes
                           XXXXXX bytes free
```

• **Type** `RD \NEWDIR` ↵
DOS displays the following message and does not remove the directory.

```
Attempt to remove current directory - \NEWDIR
```

*IMPORTANT: You cannot **remove** a directory when it is current, that is, when you are **in** the directory you want to remove.*

❹ **Remove the NEWDIR directory:**

• **Change** to the root directory.

```
A:\>
```

• **Type** `RD \NEWDIR` ↵
DOS removes the directory and displays a new prompt, but does not report success.

```
A:\>
```

• **List** the contents of the current directory.
*Since the NEWDIR directory was deleted, it is **not** displayed.*

```
 Directory of A:\
GAMES          <DIR>      05-02-93   7:46p
FOOD           <DIR>      05-02-93   7:46p
PROGRAMS       <DIR>      05-22-93   8:41p
TEMP           <DIR>      XX-XX-XX   X:XXX
BAK            <DIR>      05-22-93   8:43p
MISC           <DIR>      XX-XX-XX   X:XXX
        6 file(s)              0 bytes
                           XXXXXX bytes free
```

Exercise 47 continued...

❺ Remove the TEMP directory:

- **Type** RD \TEMP ↵

```
Invalid path, not directory,
or directory not empty
```

IMPORTANT: The RD command cannot ***remove*** *a directory unless it is* ***empty****.*

- **Change** to the TEMP directory.

```
A:\TEMP>
```

- **List** the contents of the TEMP directory.

```
 Directory of A:\TEMP

.            <DIR>      XX-XX-XX   X:XXX
..           <DIR>      XX-XX-XX   X:XXX
CHESS    GAM            9 05-02-93   8:48p
CLUE     GAM            8 05-02-93   8:17p
       4 file(s)             17 bytes
                      XXXXXX bytes free
```

- **Type** DEL *.* ↵

```
All files in directory will be deleted!
Are you sure (Y/N)?
```

- **Type** Y ↵

```
A:\TEMP>
```

- **List** the contents of the TEMP directory.

The directory is empty.

```
 Directory of A:\TEMP

.            <DIR>      XX-XX-XX   X:XXX
..           <DIR>      XX-XX-XX   X:XXX
       2 file(s)              0 bytes
                      XXXXXX bytes free
```

- **Change** to the root directory (the parent of TEMP).

```
A:\>
```

- **List** the contents of the current directory.

```
 Directory of A:\

GAMES          <DIR>      05-02-93   7:46p
FOOD           <DIR>      05-02-93   7:46p
PROGRAMS       <DIR>      05-22-93   8:41p
TEMP           <DIR>      XX-XX-XX   X:XXX
BAK            <DIR>      05-22-93   8:43p
MISC           <DIR>      XX-XX-XX   X:XXX
       6 file(s)              0 bytes
                      XXXXXX bytes free
```

- **Type** RD \TEMP ↵

DOS removes the directory and displays a new prompt, but does not report success.

- **List** the contents of the current directory.

The TEMP directory does not appear.

```
 Directory of A:\

GAMES          <DIR>      05-02-93   7:46p
FOOD           <DIR>      05-02-93   7:46p
PROGRAMS       <DIR>      05-22-93   8:41p
BAK            <DIR>      05-22-93   8:43p
MISC           <DIR>      XX-XX-XX   X:XXX
       5 file(s)              0 bytes
                      XXXXXX bytes free
```

❻ Make a directory, examine it, and remove it:

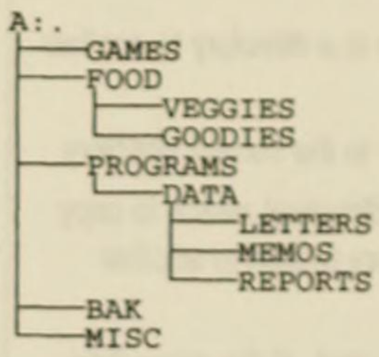
- **Make a directory**; name it **FUN** (review, Exercise 45).
- **List** the contents of the root directory; notice the FUN directory.
- **Change** to the FUN directory.
- **List** the contents of the FUN directory.
- **Change** to the root directory.
- **Remove** the FUN directory (RD FUN).
- **List** the contents of the root directory; the FUN directory is gone.

❼

- **Go on** to Exercise 48
  or **take** the disk out of drive A: and turn the computer off.

Exercise 47 (continued)
RD (remove directory)

Directory structure at the end of Exercise 47



EXERCISE 48
XCOPY

Copies all the files (except hidden and system files) in a directory or in an entire directory branch.

OBJECTIVES:

- identify the use of the /S (subdirectory) switch and the /E (empty directory) switch
- copy all the files in a directory to another directory
- copy a directory to the current directory
- use the /S (subdirectory) switch to copy an entire directory branch to another directory
- copy a directory and, at the same time, create a new directory to hold the files

- Terms and Notes -

IMPORTANT: XCOPY is an **external command**. If you get a **Bad command or file name** message, C:\DOS is not in the PATH command of your AUTOEXEC.BAT file.

NOTE: A common use of the XCOPY command is to *back up* files and directories on one disk to another disk. When you use this method to "reproduce" a disk, the disks do not need to be identical in size and density (as they do when you use the DISKCOPY command).

To copy files to a different disk, simply put the desired drive letter in the *source* and *destination parameters*.

For example, to back up the disk in drive A: to the disk in drive B:, type:

```
XCOPY A: B: /S/E
```

This book does not instruct you to use XCOPY to copy files to a different disk drive because this book does not know what disks drives your system has and does not want to instruct you to put files on the hard disk.

Using XCOPY

XCOPY is similar to COPY, but instead of copying a *file* or *group of files*, XCOPY copies the contents of a *directory* or *directory branch*. You use XCOPY to copy a *directory* to a different directory and/or a different drive.

Because you need to define the location of the files you want to copy, you must use a *source parameter* with the XCOPY command. It is common to also use a *destination parameter* in the XCOPY command to specify the *destination* of the files you want to copy. For example:

```
XCOPY   \GAMES   \TEMP
  ↑       ↑       ↑
command  source  destination
 name   parameter parameter
```

If you omit the *destination*, DOS copies the files to the *current* directory.

To copy all the directories and their files in a directory branch, you must use the /S (subdirectory) switch. For example, XCOPY PROGRAM\DATA BAK /S copies all the files in the DATA directory *plus* the LETTERS, MEMOS, and REPORTS directories and all of their files to the BAK directory.

An *empty directory* has no files in it. To reproduce (copy) directories that are *empty*, you must add the /E (empty directory) switch to the /S switch.

Because the XCOPY command often copies large numbers of files, errors can be significant. It is wise to use the *entire* source and destination paths in your command. Using the entire path forces you to think about *exactly* what you are doing, so you are less likely to make errors.

❶ • If necessary, **access** the DUPLICATE Learning Disk on drive A: and **change** to this common DOS prompt: `A:\>`

❷ Make a directory and display the directory tree:

- **Make** a directory; name it TEMP (review, Exercise 45).
- **Display** the directory tree (review, Exercise 13).

```
A:.
├───GAMES
├───FOOD
│   ├───VEGGIES
│   └───GOODIES
├───PROGRAMS
│   └───DATA
│       ├───LETTERS
│       ├───MEMOS
│       └───REPORTS
├───TEMP
├───BAK
└───MISC
```

❸ Copy all the files in a directory to another directory:

(copy files in GAMES to the TEMP directory)

- **Type** `XCOPY \GAMES \TEMP` ↵

```
Reading source file(s)...
GAMES\ASTRO.GAM
GAMES\CHESS.GAM
GAMES\JEOPARDY.GAM
GAMES\CLUE.GAM
GAMES\TRIVIA.GAM
GAMES\OLDMAID.GAM
       6 File(s) copied
```

- **Type** `DIR TEMP` ↵

```
 Directory of A:\TEMP

.            <DIR>      XX-XX-XX   X:XXX
..           <DIR>      XX-XX-XX   X:XXX
ASTRO    GAM             9 05-02-93   8:48p
CHESS    GAM             9 05-02-93   8:48p
JEOPARDY GAM            12 05-02-93   8:49p
CLUE     GAM             8 05-02-93   8:17p
TRIVIA   GAM            10 05-02-93   8:21p
OLDMAID  GAM            11 05-02-93   8:23p
       8 file(s)              59 bytes
                       XXXXXX bytes free
```

Exercise 48 continued...

❹ Copy the contents of a directory to the current directory:

(copy all the files in MISC to the BAK directory)

- **List** the contents of the MISC directory.

```
 Directory of A:\MISC

.             <DIR>      XX-XX-XX   X:XXX
..            <DIR>      XX-XX-XX   X:XXX
HELLO                99 05-25-93    9:36p
HURRAH               54 05-02-93    8:40p
NOT                  60 05-25-93    9:37p
       5 file(s)          213 bytes
                       192512 bytes free
```

- **Change** to the BAK directory.

```
A:\BAK>
```

- **List** the contents of the current (BAK) directory.

```
 Directory of A:\BAK

.             <DIR>      05-22-93    8:43p
..            <DIR>      05-22-93    8:43p
       2 file(s)              0 bytes
                         XXXXXX bytes free
```

- **Type** XCOPY \MISC ↵ (DOS *needs* the full path here).

```
Reading source file(s)...
\MISC\HELLO
\MISC\HURRAH
\MISC\NOT
        3 File(s) copied
```

- **List** the contents of the current (BAK) directory.

```
 Directory of A:\BAK

.             <DIR>      05-22-93    8:43p
..            <DIR>      05-22-93    8:43p
HELLO                99 05-25-93    9:36p
HURRAH               54 05-02-93    8:40p
NOT                  60 05-25-93    9:37p
       5 file(s)          213 bytes
                         XXXXXX bytes free
```

- **Change** to the *root* directory.

```
A:\>
```

❺ Copy an entire directory branch to another directory:

(copy the DATA directory branch to the BAK directory)

To copy all the files and directories in a directory branch, you must use the /S switch.

- **List** the files in the BAK directory from the current directory.
  DOS displays the three files you just copied to the BAK directory.
- **List** the current directory.
  DOS displays the six directories in the root directory.
- **Type** XCOPY \PROGRAMS\DATA \BAK /S ↵

```
Reading source file(s)...
PROGRAMS\DATA\MEMBER.DB
PROGRAMS\DATA\CLUB.DB
PROGRAMS\DATA\MUSIC.DB
PROGRAMS\DATA\REPORT.DOC
PROGRAMS\DATA\SCRIPT.DOC
PROGRAMS\DATA\PAYROLL.WK
PROGRAMS\DATA\SALES.WK
PROGRAMS\DATA\AGENDA.DOC
PROGRAMS\DATA\GRADES.WK
PROGRAMS\DATA\LETTERS\JONES.LET
PROGRAMS\DATA\LETTERS\SMITH.LET
PROGRAMS\DATA\LETTERS\LOPEZ.LET
PROGRAMS\DATA\LETTERS\LETTER1
PROGRAMS\DATA\LETTERS\LETTER2
PROGRAMS\DATA\LETTERS\LETTER3
PROGRAMS\DATA\MEMOS\SMITH.MEM
PROGRAMS\DATA\MEMOS\LOPEZ.MEM
PROGRAMS\DATA\MEMOS\JONES.MEM
PROGRAMS\DATA\MEMOS\MEMO3
PROGRAMS\DATA\MEMOS\MEMO1
PROGRAMS\DATA\MEMOS\MEMO2
PROGRAMS\DATA\REPORTS\LOPEZ.RPT
PROGRAMS\DATA\REPORTS\SMITH.RPT
PROGRAMS\DATA\REPORTS\JONES.RPT
PROGRAMS\DATA\REPORTS\REPORT3
PROGRAMS\DATA\REPORTS\REPORT1
PROGRAMS\DATA\REPORTS\REPORT2
        27 File(s) copied
```

Exercise 48 continued...

STEPS to

Copy one directory to another directory

1 Type XCOPY
2 Press Space
3 Type the directory you want to copy files from (including the path to it).
4 Press Space
5 Type the directory you want to copy files to (including the path to it).
6 Press ↵

Copy one directory to the current directory

1 Change to the directory to receive the files.
2 Type XCOPY
3 Press Space
4 Type the directory you want to copy files from (including the path to it).
5 Press ↵

Copy a directory branch to another directory

1 Type XCOPY
2 Press Space
3 Type the directory you want to copy files and subdirectories from (including the path to it).
4 Press Space
5 Type the directory you want to copy files to (including the path to it).
6 Press Space
7 Type /S
8 Press ↵

- **List** the files in the BAK directory.
  The three files that you copied in step 4 plus the files and directories that you copied in this step are displayed.

```
 Directory of A:\BAK

.            <DIR>      05-22-93   8:43p
..           <DIR>      05-22-93   8:43p
HELLO                99 05-25-93   9:36p
HURRAH               54 05-02-93   8:40p
NOT                  60 05-25-93   9:37p
MEMBER   DB           9 05-25-93   9:28p
CLUB     DB           7 05-25-93   9:29p
MUSIC    DB           8 05-25-93   9:29p
REPORT   DOC         10 05-25-93   9:30p
SCRIPT   DOC         10 05-25-93   9:30p
PAYROLL  WK          10 05-25-93   9:31p
SALES    WK           8 05-25-93   9:31p
AGENDA   DOC         10 05-25-93   9:32p
GRADES   WK           9 05-25-93   9:32p
LETTERS      <DIR>      XX-XX-XX   X:XXX
MEMOS        <DIR>      XX-XX-XX   X:XXX
REPORTS      <DIR>      XX-XX-XX   X:XXX
      17 file(s)            294 bytes
                         XXXXXX bytes free
```

- **Type** DIR BAK\LETTERS ↵
  (to list the contents of the *new* LETTERS directory).

```
 Directory of A:\BAK\LETTERS

.            <DIR>      XX-XX-XX   X:XXX
..           <DIR>      XX-XX-XX   X:XXX
JONES    LET           9 05-02-93   7:48p
SMITH    LET           9 05-02-93   8:13p
LOPEZ    LET           9 05-02-93   8:13p
LETTER1                7 05-02-93   8:15p
LETTER2                7 05-02-93   8:16p
LETTER3                7 05-02-93   8:22p
       8 file(s)             48 bytes
                         XXXXXX bytes free
```

- **List** the contents of the *new* MEMOS directory.

```
 Directory of A:\BAK\MEMOS

.            <DIR>      XX-XX-XX   X:XXX
..           <DIR>      XX-XX-XX   X:XXX
SMITH    MEM           9 05-02-93   8:20p
LOPEZ    MEM           9 05-02-93   8:21p
JONES    MEM           9 05-02-93   8:22p
MEMO3                  5 05-02-93   8:21p
MEMO1                  5 05-02-93   8:24p
MEMO2                  5 05-02-93   8:24p
       8 file(s)             42 bytes
                         XXXXXX bytes free
```

- **List** the contents of the *new* REPORTS directory.

```
 Directory of A:\BAK\REPORTS

.            <DIR>      XX-XX-XX   X:XXX
..           <DIR>      XX-XX-XX   X:XXX
LOPEZ    RPT           9 05-02-93   8:19p
SMITH    RPT           9 05-02-93   8:20p
JONES    RPT           9 05-02-93   8:23p
REPORT3                7 05-02-93   8:16p
REPORT1                7 05-02-93   8:20p
REPORT2                7 05-02-93   8:25p
       8 file(s)             48 bytes
                         XXXXXX bytes free
```

- **Clear** the screen.

```
A:\>
```

- **List** the contents of the *current* (root) directory.

```
 Directory of A:\

GAMES        <DIR>      05-02-93   7:46p
FOOD         <DIR>      05-02-93   7:46p
PROGRAMS     <DIR>      05-22-93   8:41p
TEMP         <DIR>      XX-XX-XX   X:XXX
BAK          <DIR>      05-22-93   8:43p
MISC         <DIR>      XX-XX-XX   X:XXX
       6 file(s)              0 bytes
                         XXXXXX bytes free
```

Exercise 48 continued...

❻ Copy a directory and create a new directory to hold the files:

(copy GOODIES to a new directory named DESSERT)

- **Type** XCOPY \FOOD\GOODIES \DESSERT ↵

  *DOS wants to know if you are copying the files to a **single file** or to a **directory**.*

```
Does DESSERT specify a file name
or directory name on the target
(F = file, D = directory)?
```

- **Type** D

```
Reading source file(s)...
FOOD\GOODIES\CAKE.DES
FOOD\GOODIES\COOKIES.DES
FOOD\GOODIES\ICECREAM.DES
FOOD\GOODIES\PIE.DES
FOOD\GOODIES\PUDDING.DES
FOOD\GOODIES\JELLO.DES
        6 File(s) copied
```

- **Type** DIR DESSERT ↵ (to list files in DESSERT directory).

```
 Directory of A:\DESSERT

.            <DIR>      XX-XX-XX  1X:XXX
..           <DIR>      XX-XX-XX  1X:XXX
CAKE     DES            8 05-02-93   8:45p
COOKIES  DES           11 05-02-93   8:46p
ICECREAM DES           12 05-02-93   8:46p
PIE      DES            7 05-02-93   8:46p
PUDDING  DES           11 05-02-93   8:19p
JELLO    DES            9 05-02-93   8:23p
        8 file(s)             58 bytes
                       XXXXXX bytes free
```

- **List** the files in the *current* (root) directory.

```
 Directory of A:\

GAMES        <DIR>      05-02-93   7:46p
FOOD         <DIR>      05-02-93   7:46p
PROGRAMS     <DIR>      05-22-93   8:41p
TEMP         <DIR>      XX-XX-XX   X:XXX
BAK          <DIR>      05-22-93   8:43p
DESSERT      <DIR>      XX-XX-XX   X:XXX
MISC         <DIR>      XX-XX-XX   X:XXX
        7 file(s)              0 bytes
                       XXXXXX bytes free
```

❼ Display and print the directory structure:

- **Type** TREE ↵

```
A:.
    GAMES
    FOOD
        VEGGIES
        GOODIES
    PROGRAMS
        DATA
            LETTERS
            MEMOS
            REPORTS
    TEMP
    BAK
        LETTERS
        MEMOS
        REPORTS
    DESSERT
    MISC
```

- **Make sure** the printer is ready to receive data.
- **Type** TREE>PRN ↵
- **Force** the printer to eject the paper.

  The result should match the one above; however, your printer may print characters instead of lines (your printer manual may have instructions about how to change to a "graphics" mode that will print lines).

❽ DOS 6 only

- **Go on** to Exercise 49
  or **take** the disk out of drive A: and turn the computer off.

DOS 5 only

- **Skip** Exercise 49 and **Go on** to Exercise 50
  or **take** the disk out of drive A: and turn the computer off.

EXERCISE 49

DOS 6 only

DELTREE (delete tree)

Deletes a directory and all the files and subdirectories within it.

OBJECTIVES:

- delete a directory and its files
- delete files and subdirectories in a directory without deleting the directory itself
- delete an entire directory branch

STEPS to

Delete a directory and everything in the directory

1 **Change** to a directory level above the directory you want to delete.
2 **Type** DELTREE
3 **Press** Space
4 **Type** the directory you want to delete, including the path to the directory, if necessary.
5 **Press** ↵
DOS asks for confirmation.
6 **Type** Y ↵

Delete everything in a directory, but not the directory itself

1 **Change** to the directory whose contents you want to delete.
2 **Type** DELTREE
3 **Press** Space
4 **Type** the directory you want to delete, starting with the path from the root directory.
5 **Press** ↵
DOS asks for confirmation.
6 **Type** Y ↵

DOS 5 users skip Exercise 49

Using DELTREE

Use the DELTREE command with caution. Deleting an entire directory and all of its subdirectories (a directory branch) can cause you to lose important files. On the other hand, not being able to delete an entire directory or directory branch can result in tedious, time-consuming work when you want to remove more than just a few directories and their files.

When you use DELTREE, you must tell DOS what directory to delete. For example, to delete the BAK directory branch, type: DELTREE \BAK ↵

1 • If necessary, **access** the DUPLICATE Learning Disk on drive A: and **change** to this common DOS prompt: `A:\>`

2 **Delete a directory:**
(delete the DESSERT directory)

• **Display** the directory tree.

```
A:.
   GAMES
   FOOD
      VEGGIES
      GOODIES
   PROGRAMS
      DATA
         LETTERS
         MEMOS
         REPORTS
   TEMP
   BAK
         LETTERS
         MEMOS
         REPORTS
   DESSERT ← subdirectory of the root directory
   MISC
```

• **List** the contents of the DESSERT directory.

```
 Directory of A:\DESSERT

.            <DIR>      XX-XX-XX  1X:XXX
..           <DIR>      XX-XX-XX  1X:XXX
CAKE     DES             8 05-02-93   8:45p
COOKIES  DES            11 05-02-93   8:46p
ICECREAM DES            12 05-02-93   8:46p
PIE      DES             7 05-02-93   8:46p
PUDDING  DES            11 05-02-93   8:19p
JELLO    DES             9 05-02-93   8:23p
        8 file(s)             58 bytes
                       XXXXXX bytes free
```

• **Type** DELTREE \DESSERT ↵

*IMPORTANT: DELTREE is an **external command**. If you get a **Bad command or file name** message, C:\DOS is not in the PATH command of your AUTOEXEC.BAT file. You can probably complete this exercise if you type PATH C:\DOS ↵ and repeat step 2 (see Exercise 66, page 168).*

Since the consequences of this command are serious, DOS asks for confirmation.

```
Delete directory "\dessert" and all its subdirectories? [yn]
```

• **Type** Y ↵

```
Deleting \dessert...
```

• **List** the contents of the *current* (root) directory.
The DESSERT directory is gone.

```
 Directory of A:\

GAMES          <DIR>      05-02-93   7:46p
FOOD           <DIR>      05-02-93   7:46p
PROGRAMS       <DIR>      05-22-93   8:41p
TEMP           <DIR>      XX-XX-XX   X:XXX
BAK            <DIR>      05-22-93   8:43p
MISC           <DIR>      XX-XX-XX   X:XXX
        6 file(s)              0 bytes
                         XXXXXX bytes free
```

Exercise 49 continued...

NOTE: In step 3, if there had been subdirectories in the TEMP directory, they would have been deleted also.

❸ Delete the entire contents of a directory, but not the directory:
(delete files in the TEMP directory)
To delete the entire contents of a directory without deleting the directory itself, you must make that directory the *current directory* (from which you issue the DELTREE command).

- **Change** to the TEMP directory.

```
A:\TEMP>
```

- **Type** `DELTREE \TEMP` ↵ (DOS needs full path here).

```
Delete directory "\temp" and all its subdirectories? [yn]
```

- **Type** `Y` ↵

```
Deleting \temp...
```

- **List** the root directory (DIR\).
  *Because the TEMP directory was **current**, the TEMP directory was not deleted, just the **contents** of the TEMP directory were deleted.*

```
 Directory of A:\

GAMES          <DIR>      05-02-93   7:46p
FOOD           <DIR>      05-02-93   7:46p
PROGRAMS       <DIR>      05-22-93   8:41p
TEMP           <DIR>      XX-XX-XX   X:XXX
BAK            <DIR>      05-22-93   8:43p
MISC           <DIR>      XX-XX-XX   X:XXX
        6 file(s)              0 bytes
                           XXXXXX bytes free
```

- **List** the contents of the *current* (TEMP) directory.

```
 Directory of A:\TEMP

.              <DIR>      XX-XX-XX   X:XXX
..             <DIR>      XX-XX-XX   X:XXX
        2 file(s)              0 bytes
                           XXXXXX bytes free
```

- **Change** to the root directory.

```
A:\>
```

❹ Delete a directory and its subdirectories:
(delete the BAK directory branch)

- **Type** `DIR BAK` ↵
  DOS displays the contents of the BAK directory... 17 files (including the directories).
- **Type** `DELTREE \BAK` ↵
  DOS asks for confirmation.
- **Type** `Y` ↵
  DOS displays a message that it is "Deleting \bak..."
- **List** the contents of the *current* (root) directory.

```
 Directory of A:\

GAMES          <DIR>      05-02-93   7:46p
FOOD           <DIR>      05-02-93   7:46p
PROGRAMS       <DIR>      05-22-93   8:41p
TEMP           <DIR>      XX-XX-XX   X:XXX
MISC           <DIR>      XX-XX-XX   X:XXX
        5 file(s)              0 bytes
                           XXXXXX bytes free
```

- **Display** the directory structure.

```
A:.
    GAMES
    FOOD
        VEGGIES
        GOODIES
    PROGRAMS
        DATA
            LETTERS
            MEMOS
            REPORTS
    TEMP
    MISC
```

❺ • **Skip** Exercise 50 and **go on** to Exercise 51
or **take** the disk out of drive A: and turn the computer off.

EXERCISE 50

DOS 5 only

Delete directory

Delete a directory and all the files and subdirectories within it.

OBJECTIVES:

- delete a directory and its files
- delete the contents of a directory
- delete an entire directory branch by deleting each directory in the branch, one at a time

- Terms and Notes -

NOTE: This exercise (delete directory) was devised for DOS 5 users simply as a substitute for Exercise 49 (DELTREE), which is unavailable to DOS 5 users.

STEPS to

Delete a directory without subdirectories

1 **Change** to the directory you want to delete.
2 **List** the contents of the directory.
3 **Delete** all files in the directory of directory to remove.
4 **Change** to the parent directory.
5 **Type** RD
6 **Press** Space
7 **Type** the directory's name.
8 **Press** ↵

Delete a directory branch

1 **Change** to the lowest level directory in the directory branch you want to delete.
2 **Perform** steps 2 through 8 of the "steps to delete a directory without subdirectories" (above).
3 **Repeat** steps 1 and 2 above until all the desired directories are deleted.

DOS 6 users skip Exercise 50

Deleting directories using DOS 5

DOS 5 does not have the DELTREE command, which can easily delete a directory or an entire directory branch.

If you are using DOS 5, use the following steps to remove individual directories, one at a time:

- delete the files in the directory you want to delete, if there are files in it,
- change out of the directory, if you are in it, and
- use the RD command to remove the directory (see Exercise 47).

❶
- If necessary, **access** the DUPLICATE Learning Disk on drive A: and **change** to this common DOS prompt: `A:\>`

❷ Delete the DESSERT directory:

- **List** the contents of the *current* (root) directory; notice the DESSERT directory.
- **Change** to the DESSERT directory.
- **List** the contents of the *current* (DESSERT) directory.
- **Type** `DEL *.*` ↵
  (to delete *all* the files in the DESSERT directory).
  DOS warns you that "All files in directory will be deleted! Are you sure (Y/N)?"
- **Type** `Y` ↵
- **List** the contents of the *current* (DESSERT) directory; it should be empty.
- **Change** to the root directory.
- **Type** `RD DESSERT` ↵
- **List** the contents of the *current* (root) directory; the DESSERT directory is gone; notice the TEMP directory (you will work with it next).

❸ Delete the contents of the TEMP directory:

- **Change** to the TEMP directory.
- **List** the contents of the *current* directory.
- **Delete** *all* the files in the TEMP directory.
- **List** the contents of the *current* directory; it should be empty.
- **Change** to the root directory.
- **List** the contents of the *current* directory; the TEMP directory is still there; notice the BAK directory (you will work with it next).

❹ Delete all the files from the BAK directory branch:

- **Change** to the BAK directory.
- **List** the contents of the *current* directory.
- **Delete** *all* the files in the BAK directory.
- **List** the contents of the *current* directory again.
  The BAK directory still contains subdirectories.

```
 Directory of A:\BAK

.            <DIR>      06-22-93  10:43p
..           <DIR>      06-22-93  10:43p
LETTERS      <DIR>      XX-XX-XX   X:XXX
MEMOS        <DIR>      XX-XX-XX   X:XXX
REPORTS      <DIR>      XX-XX-XX   X:XXX
       5 file(s)              0 bytes
                        XXXXXX bytes free
```

NOTE: Each subdirectory of BAK must be emptied and then removed before the BAK directory can be deleted.

Exercise 50 continued...

5 **Delete all the files from the LETTERS directory and remove it:**

- **Change** to the LETTERS directory.
- **List** the contents of the *current* directory.
- **Delete** *all* of the files in the LETTERS directory.
- **List** the contents of the *current* directory; it should be empty.
- **Change** to the *parent* directory of LETTERS (\BAK).
- **Remove** the LETTERS directory (review, Exercise 47).

6 **Delete all the files from the MEMOS directory and remove it:**

- **Change** to the MEMOS directory.
- **List** the contents of the *current* directory.
- **Delete** *all* of the files in the MEMOS directory.
- **List** the contents of the *current* directory; it should be empty.
- **Change** to the *parent* directory of MEMOS (\BAK).
- **Remove** the MEMOS directory (review, Exercise 47).

7 **Delete all the files from the REPORTS directory and remove it:**

- **Change** to the REPORTS directory.
- **List** the contents of the *current* directory.
- **Delete** *all* of the files in the REPORTS directory.
- **List** the contents of the *current* directory; it should be empty.
- **Change** to the *parent* directory of REPORTS (\BAK).
- **Remove** the REPORTS directory (review, Exercise 47).

8 **Delete the BAK directory:**

- **List** the *current* directory; it should be empty.
- **Change** to the *parent* (root) directory.
- **Remove** the BAK directory (review, Exercise 47).
- **List** the contents of the *current* directory.

```
 Directory of A:\

GAMES          <DIR>      05-02-93   7:46p
FOOD           <DIR>      05-02-93   7:46p
PROGRAMS       <DIR>      05-22-93   8:41p
TEMP           <DIR>      XX-XX-XX   X:XXX
MISC           <DIR>      XX-XX-XX   X:XXX
        5 file(s)                0 bytes
                         XXXXXX bytes free
```

9 **Display the directory structure:**

- **Type** TREE ↵

```
A:.
├─GAMES
├─FOOD
│  ├─VEGGIES
│  └─GOODIES
├─PROGRAMS
│  └─DATA
│      ├─LETTERS
│      ├─MEMOS
│      └─REPORTS
├─TEMP
└─MISC
```

10 • **Go on** to Exercise 51
or **take** the disk out of drive A: and turn the computer off.

EXERCISE 51

Print contents of disk

Print all the directories and their files by issuing this command from the root directory: DIR/S>PRN

OBJECTIVE:

- print a list showing all the files on the DUPLICATE Learning Disk

❶
- If necessary, **access** the DUPLICATE Learning Disk on drive A: and **change** to this common DOS prompt: `A:\>`

❷ **Print a list showing all files on the DUPLICATE Learning Disk:**
- **Make sure** the printer is ready to receive data.
- **Type** `DIR /S>PRN` ↵
  The first page or two are ejected.
- **Force** the printer to eject the remaining page.

Page breaks will vary.

```
 Volume in drive A is LEARNING
 Volume Serial Number is XXXX-XXXX
Directory of A:\

GAMES          <DIR>      05-02-93   7:46p
FOOD           <DIR>      05-02-93   7:46p
PROGRAMS       <DIR>      05-22-93   8:41p
TEMP           <DIR>      XX-XX-XX   X:XXX
MISC           <DIR>      XX-XX-XX   X:XXX
       5 file(s)              0 bytes
Directory of A:\FOOD

.              <DIR>      05-02-93   7:46p
..             <DIR>      05-02-93   7:46p
VEGGIES        <DIR>      05-02-93   8:27p
GOODIES        <DIR>      05-02-93   8:28p
       4 file(s)              0 bytes
Directory of A:\FOOD\GOODIES

.              <DIR>      05-02-93   8:28p
..             <DIR>      05-02-93   8:28p
CAKE     DES         8 05-02-93   8:45p
COOKIES  DES        11 05-02-93   8:46p
ICECREAM DES        12 05-02-93   8:46p
PIE      DES         7 05-02-93   8:46p
PUDDING  DES        11 05-02-93   8:19p
JELLO    DES         9 05-02-93   8:23p
       8 file(s)             58 bytes
Directory of A:\FOOD\VEGGIES

.              <DIR>      05-02-93   8:27p
..             <DIR>      05-02-93   8:27p
CABBAGE  VEG        11 05-02-93   8:47p
CARROTS  VEG        11 05-02-93   8:47p
KALE     VEG         8 05-02-93   8:47p
LETTUCE  VEG        11 05-02-93   8:47p
CELERY   VEG        10 05-02-93   8:48p
CORN     VEG         8 05-02-93   8:17p
RADISH   VEG        10 05-02-93   8:17p
POTATOES VEG        12 05-02-93   8:18p
      10 file(s)             81 bytes
Directory of A:\GAMES

.              <DIR>      05-02-93   7:46p
..             <DIR>      05-02-93   7:46p
ASTRO    GAM         9 05-02-93   8:48p
CHESS    GAM         9 05-02-93   8:48p
JEOPARDY GAM        12 05-02-93   8:49p
CLUE     GAM         8 05-02-93   8:17p
TRIVIA   GAM        10 05-02-93   8:21p
OLDMAID  GAM        11 05-02-93   8:23p
       8 file(s)             59 bytes
Directory of A:\MISC

.              <DIR>      XX-XX-XX   X:XXX
..             <DIR>      XX-XX-XX   X:XXX
HELLO           99 05-25-93   9:36p
HURRAH          54 05-02-93   8:40p
NOT             60 05-25-93   9:37p
       5 file(s)            213 bytes
```

```
Directory of A:\PROGRAMS

.              <DIR>      05-22-93   8:41p
..             <DIR>      05-22-93   8:41p
CLS      DAT        290 04-22-93   4:05p
OPENING  DAT        319 04-22-93   4:05p
CD       DAT        479 04-22-93   3:57p
SHOWME   BAT        139 04-22-93   3:59p
DB       EXE      31458 04-22-93   3:21p
SS       EXE      31374 04-22-93   3:06p
WP       EXE      31426 04-22-93   3:10p
DATA           <DIR>      05-22-93   8:43p
      10 file(s)          95485 bytes
Directory of A:\PROGRAMS\DATA

.              <DIR>      05-22-93   8:43p
..             <DIR>      05-22-93   8:43p
MEMBER   DB           9 05-25-93   9:28p
CLUB     DB           7 05-25-93   9:29p
MUSIC    DB           8 05-25-93   9:29p
REPORT   DOC         10 05-25-93   9:30p
SCRIPT   DOC         10 05-25-93   9:30p
PAYROLL  WK          10 05-25-93   9:31p
SALES    WK           8 05-25-93   9:31p
AGENDA   DOC         10 05-25-93   9:32p
GRADES   WK           9 05-25-93   9:32p
LETTERS        <DIR>      XX-XX-XX   X:XXX
MEMOS          <DIR>      XX-XX-XX   X:XXX
REPORTS        <DIR>      XX-XX-XX   X:XXX
      14 file(s)             81 bytes
Directory of A:\PROGRAMS\DATA\LETTERS

.              <DIR>      XX-XX-XX   X:XXX
..             <DIR>      XX-XX-XX   X:XXX
JONES    LET          9 05-02-93   7:48p
SMITH    LET          9 05-02-93   8:13p
LOPEZ    LET          9 05-02-93   8:13p
LETTER1               7 05-02-93   8:15p
LETTER2               7 05-02-93   8:16p
LETTER3               7 05-02-93   8:22p
       8 file(s)             48 bytes
Directory of A:\PROGRAMS\DATA\MEMOS

.              <DIR>      XX-XX-XX   X:XXX
..             <DIR>      XX-XX-XX   X:XXX
SMITH    MEM          9 05-02-93   8:20p
LOPEZ    MEM          9 05-02-93   8:21p
JONES    MEM          9 05-02-93   8:22p
MEMO3                 5 05-02-93   8:21p
MEMO1                 5 05-02-93   8:24p
MEMO2                 5 05-02-93   8:24p
       8 file(s)             42 bytes
Directory of A:\PROGRAMS\DATA\REPORTS

.              <DIR>      XX-XX-XX   X:XXX
..             <DIR>      XX-XX-XX   X:XXX
LOPEZ    RPT          9 05-02-93   8:19p
SMITH    RPT          9 05-02-93   8:20p
JONES    RPT          9 05-02-93   8:23p
REPORT3               7 05-02-93   8:16p
REPORT1               7 05-02-93   8:20p
REPORT2               7 05-02-93   8:25p
       8 file(s)             48 bytes
Directory of A:\TEMP

.              <DIR>      XX-XX-XX   X:XXX
..             <DIR>      XX-XX-XX   X:XXX
       2 file(s)              0 bytes
Total files listed:
      90 file(s)          96115 bytes
                         XXXXXX bytes free
```

❸
- **Go on** to Exercise 52
  or **take** the disk out of drive A: and turn the computer off.

EXERCISE 52

Practice

LESSON FIVE
Organizing Files

OBJECTIVE:

- review the following tasks from the exercises in Lesson Five:

  MD (make directory)
  Transfer files to new directories
  RD (remove directory)
  XCOPY
  DELTREE (delete tree) (**DOS 6 only**)
  Delete directory (**DOS 5 only**)
  Print contents of disk

The COMMANDS to perform the steps below are listed in Appendix I. Try to complete the Practice Exercise without looking in the Appendix for help.

Use the DIR command to list the contents of directories before and after performing the commands listed in each step (in a way that is useful to you). This will help you check your work and gain a sense of what is happening with the directories and their contents.

1. If necessary, **access** the DUPLICATE Learning Disk on drive A: and **change** to this common DOS prompt: `A:\>`

2. **Make** a directory; name it BAK.

3. **Make** a directory; name it TOYS.

4. **Make** a directory; name it NEW.

5. **Remove** the NEW directory.

6. **Change** to the DATA directory (a subdirectory of PROGRAMS).

7. **Make** a directory; name it SS.

8. **Make** a directory; name it DB.

9. **Make** a directory; name it WP.

10. **Change** to the root directory.

11. **Copy** the GAMES directory to the TOYS directory.

```
Reading source file(s)...
GAMES\ASTRO.GAM
GAMES\CHESS.GAM
GAMES\JEOPARDY.GAM
GAMES\CLUE.GAM
GAMES\TRIVIA.GAM
GAMES\OLDMAID.GAM
        6 File(s) copied
```

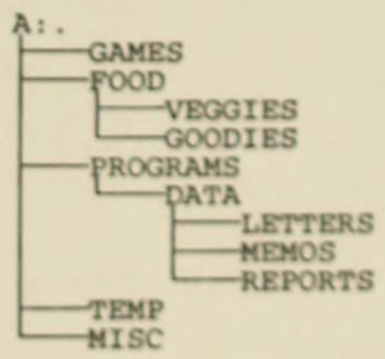
12. **Copy** the FOOD directory and its subdirectories to the BAK directory.

```
Reading source file(s)...
FOOD\VEGGIES\CABBAGE.VEG
FOOD\VEGGIES\CARROTS.VEG
FOOD\VEGGIES\KALE.VEG
FOOD\VEGGIES\LETTUCE.VEG
FOOD\VEGGIES\CELERY.VEG
FOOD\VEGGIES\CORN.VEG
FOOD\VEGGIES\RADISH.VEG
FOOD\VEGGIES\POTATOES.VEG
FOOD\GOODIES\CAKE.DES
FOOD\GOODIES\COOKIES.DES
FOOD\GOODIES\ICECREAM.DES
FOOD\GOODIES\PIE.DES
FOOD\GOODIES\PUDDING.DES
FOOD\GOODIES\JELLO.DES
       14 File(s) copied
```

HINT:
The bolded term at the beginning of each exercise step gives a clue about the command that should be used to complete the step.
For example:

bolded term	command used
Copy	XCOPY
Transfer	MOVE (**DOS 6**)
Transfer	COPY and DEL (**DOS 5**)
Remove	RD
Delete	DELTREE (**DOS 6**)
Delete	delete files from the directory and RD(**DOS 5**)

directory structure at beginning of Exercise 52



summary of files transferred in Exercise 52

files transferred	*from directory*	*to directory*
*.WK	DATA	SS
*.DB	DATA	DB
*.DOC	DATA	WP

Exercise 52 continued...

13 **Display** the directory structure.

```
A:.
    GAMES
    FOOD
        VEGGIES
        GOODIES
    PROGRAMS
        DATA
            SS
            DB
            WP
            LETTERS
            MEMOS
            REPORTS
    TEMP
    BAK
        VEGGIES
        GOODIES
    TOYS
    MISC
```

14 **Change** to the DATA directory.

15 **Transfer** files that end with .WK to the SS directory.

16 **Transfer** files that end with .DB to the DB directory.

17 **Transfer** files that end with .DOC to the WP directory.

18 **Change** to the root directory.

19 **Delete** the TOYS directory.

20 **Delete** the BAK directory branch.

21 **Display** the directory structure.

```
A:.
    GAMES
    FOOD
        VEGGIES
        GOODIES
    PROGRAMS
        DATA
            SS
            DB
            WP
            LETTERS
            MEMOS
            REPORTS
    TEMP
    MISC
```

22 **Print** the contents of the DUPLICATE Learning Disk.
The results are on the next page.

Exercise 52 continued...

Page breaks will vary.

```
 Volume in drive A is LEARNING
 Volume Serial Number is XXXX-XXXX
Directory of A:\

GAMES        <DIR>      05-02-93   7:46p
FOOD         <DIR>      05-02-93   7:46p
PROGRAMS     <DIR>      05-22-93   8:41p
TEMP         <DIR>      XX-XX-XX   X:XXX
MISC         <DIR>      XX-XX-XX   X:XXX
       5 file(s)              0 bytes

Directory of A:\FOOD

.            <DIR>      05-02-93   7:46p
..           <DIR>      05-02-93   7:46p
VEGGIES      <DIR>      05-02-93   8:27p
GOODIES      <DIR>      05-02-93   8:28p
       4 file(s)              0 bytes

Directory of A:\FOOD\GOODIES

.            <DIR>      05-02-93   8:28p
..           <DIR>      05-02-93   8:28p
CAKE     DES         8 05-02-93   8:45p
COOKIES  DES        11 05-02-93   8:46p
ICECREAM DES        12 05-02-93   8:46p
PIE      DES         7 05-02-93   8:46p
PUDDING  DES        11 05-02-93   8:19p
JELLO    DES         9 05-02-93   8:23p
       8 file(s)             58 bytes

Directory of A:\FOOD\VEGGIES

.            <DIR>      05-02-93   8:27p
..           <DIR>      05-02-93   8:27p
CABBAGE  VEG        11 05-02-93   8:47p
CARROTS  VEG        11 05-02-93   8:47p
KALE     VEG         8 05-02-93   8:47p
LETTUCE  VEG        11 05-02-93   8:47p
CELERY   VEG        10 05-02-93   8:48p
CORN     VEG         8 05-02-93   8:17p
RADISH   VEG        10 05-02-93   8:17p
POTATOES VEG        12 05-02-93   8:18p
      10 file(s)             81 bytes

Directory of A:\GAMES

.            <DIR>      05-02-93   7:46p
..           <DIR>      05-02-93   7:46p
ASTRO    GAM         9 05-02-93   8:48p
CHESS    GAM         9 05-02-93   8:48p
JEOPARDY GAM        12 05-02-93   8:49p
CLUE     GAM         8 05-02-93   8:17p
TRIVIA   GAM        10 05-02-93   8:21p
OLDMAID  GAM        11 05-02-93   8:23p
       8 file(s)             59 bytes

Directory of A:\MISC

.            <DIR>      XX-XX-XX   X:XXX
..           <DIR>      XX-XX-XX   X:XXX
HELLO               99 05-25-93   9:36p
HURRAH              54 05-02-93   8:40p
NOT                 60 05-25-93   9:37p
       5 file(s)            213 bytes

Directory of A:\PROGRAMS

.            <DIR>      05-22-93   8:41p
..           <DIR>      05-22-93   8:41p
CLS      DAT        290 04-22-93   4:05p
OPENING  DAT        319 04-22-93   4:05p
CD       DAT        479 04-22-93   3:57p
SHOWME   BAT        139 04-22-93   3:59p
DB       EXE      31458 04-22-93   3:21p
SS       EXE      31374 04-22-93   3:06p
WP       EXE      31426 04-22-93   3:10p
DATA         <DIR>      05-22-93   8:43p
      10 file(s)          95485 bytes
```

```
Directory of A:\PROGRAMS\DATA

.            <DIR>      05-22-93   8:43p
..           <DIR>      05-22-93   8:43p
SS           <DIR>      XX-XX-XX   X:XXX
DB           <DIR>      XX-XX-XX   X:XXa
WP           <DIR>      XX-XX-XX   X:XXa
LETTERS      <DIR>      XX-XX-XX   X:XXp
MEMOS        <DIR>      XX-XX-XX   X:XXp
REPORTS      <DIR>      XX-XX-XX   X:XXp
       8 file(s)              0 bytes

Directory of A:\PROGRAMS\DATA\DB

.            <DIR>      XX-XX-XX   X:XXa
..           <DIR>      XX-XX-XX   X:XXa
MEMBER   DB          9 05-25-93   9:28p
CLUB     DB          7 05-25-93   9:29p
MUSIC    DB          8 05-25-93   9:29p
       5 file(s)             24 bytes

Directory of A:\PROGRAMS\DATA\LETTERS

.            <DIR>      XX-XX-XX   X:XXp
..           <DIR>      XX-XX-XX   X:XXp
JONES    LET         9 05-02-93   7:48p
SMITH    LET         9 05-02-93   8:13p
LOPEZ    LET         9 05-02-93   8:13p
LETTER1              7 05-02-93   8:15p
LETTER2              7 05-02-93   8:16p
LETTER3              7 05-02-93   8:22p
       8 file(s)             48 bytes

Directory of A:\PROGRAMS\DATA\MEMOS

.            <DIR>      XX-XX-XX   X:XXp
..           <DIR>      XX-XX-XX   X:XXp
SMITH    MEM         9 05-02-93   8:20p
LOPEZ    MEM         9 05-02-93   8:21p
JONES    MEM         9 05-02-93   8:22p
MEMO3                5 05-02-93   8:21p
MEMO1                5 05-02-93   8:24p
MEMO2                5 05-02-93   8:24p
       8 file(s)             42 bytes

Directory of A:\PROGRAMS\DATA\REPORTS

.            <DIR>      XX-XX-XX   X:XXp
..           <DIR>      XX-XX-XX   X:XXp
LOPEZ    RPT         9 05-02-93   8:19p
SMITH    RPT         9 05-02-93   8:20p
JONES    RPT         9 05-02-93   8:23p
REPORT3              7 05-02-93   8:16p
REPORT1              7 05-02-93   8:20p
REPORT2              7 05-02-93   8:25p
       8 file(s)             48 bytes

Directory of A:\PROGRAMS\DATA\SS

.            <DIR>      XX-XX-XX   X:XXa
..           <DIR>      XX-XX-XX   X:XXa
PAYROLL  WK         10 05-25-93   9:31p
SALES    WK          8 05-25-93   9:31p
GRADES   WK          9 05-25-93   9:32p
       5 file(s)             27 bytes

Directory of A:\PROGRAMS\DATA\WP

.            <DIR>      XX-XX-XX   X:XXa
..           <DIR>      XX-XX-XX   X:XXa
REPORT   DOC        10 05-25-93   9:30p
SCRIPT   DOC        10 05-25-93   9:30p
AGENDA   DOC        10 05-25-93   9:32p
       5 file(s)             30 bytes

Directory of A:\TEMP

.            <DIR>      XX-XX-XX   X:XXp
..           <DIR>      XX-XX-XX   X:XXp
       2 file(s)              0 bytes

Total files listed:
      99 file(s)          96115 bytes
                         XXXXXX bytes free
```

23 **Go on** to Worksheet 19.
If desired, **take** the disk out of drive A: and turn the computer off.

WORKSHEET 19

NAME _____

TOPIC 12 and EXERCISES 45, 46, 47, 48, 49, 50, and 51

DIRECTIONS: Use the following terms to fill in the blanks below.

XCOPY	Organize files	filename extension	Print contents of disk
filename	directory levels	directory structure	DELTREE (delete tree) DOS 6
directory	directory branch	RD (remove directory)	Delete directory DOS 5
transfer files			

1. The part of the disk structure that holds files that are stored on a disk. 1. _____

2. The layers of directory levels, starting with the root directory as level one. 2. _____

3. The organization of directories on a disk. Also called directory tree. 3. _____

4. Copies all the files (except hidden or system files) in a directory or an entire directory branch. 4. _____

5. Print all the directories and their files by issuing this command from the root directory: DIR/S>PRN. 5. _____

6. A directory and all the levels of directories that are under it. 6. _____

7. The name you assign to a collection of data that you store on a disk. 7. _____

8. Deletes a directory. 8. _____

9. Move files from one directory to another directory and remove the files from the original directory. 9. _____

10. Use filenames, filename extensions, and directories to arrange your files. 10. _____

11. The optional "period and up to three characters" at the end of a filename. 11. _____

12. Deletes a directory and all the files and subdirectories within it. 12. _____

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WORKSHEET 20

NAME _____

LESSON FIVE, Questions and Commands

1. List two techniques for organizing your files.

   1. 1)_____

      2)_____

2. What part of a filename is especially useful for helping you work with *groups* of files?

   2. _____

3. Why does the hard disk need directories to organize its files?

   3. _____

4. What single command can DOS 6 users use to *transfer* files?

   4. _____

5. What two commands must DOS 5 users use to *transfer* files?

   5. _____

6. What command lets you copy a directory or an entire directory branch?

   6. _____

7. What command creates a directory?

   7. _____

8. What command removes an empty directory?

   8. _____

9. What DOS 6 commands deletes a directory and its files plus all levels of directories and their files that are under the directory (i.e., a directory branch)?

   9. _____

10. What steps must DOS 5 users use to "delete a directory" and all of the files in the directory?

    10. _____

NOTE: Remember that the term ***subdirectory*** *(as used in this book) describes a* ***directory*** *that is immediately under the* ***current*** *directory (while technically, every directory except the root directory can be called a subdirectory).*

WHAT IS THE COMMAND TO:

11. Make a subdirectory named LETTERS.

    11. _____

12. Copy files ending with .DOC from the current directory to a subdirectory named LETTERS.

    12. _____

13. Delete files ending with .DOC that are in the current directory.

    13. _____

14. Remove an empty subdirectory named TEMP.

    14. _____

15. Transfer files ending with .DB from the current directory to a subdirectory named DBASE.

    15. _____

16. Copy the MISC subdirectory to the TEMP subdirectory.

    16. _____

17. Copy the PROGRAMS directory branch to the BAK directory (both are subdirectories of the current directory).

    17. _____

18. Delete the MISC subdirectory.

    18. _____

19. Delete the FOOD directory branch (FOOD is a subdirectory).

    19. _____

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Lesson Six
DOS Editor

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TOPIC 13
DOS Editor

A text-editing program that you can use to create simple documents and batch files.

OBJECTIVES:

- identify what DOS Editor does
- identify how DOS Editor works
- identify DOS Editor features

- Terms and Notes -

WARNING: DOS Editor requires QBASIC.EXE to work, so QBASIC.EXE should be in your DOS directory and the *path* to your DOS directory should be in the PATH command of your AUTOEXEC.BAT file.

text editor
A program that operates in *ASCII file format* and that you use to create and edit *unformatted text files*.

batch files
Files that contain a series of DOS commands (in a text-only format) that, when run, will be executed one after the other.

ASCII (American Standard Code for Information Interchange)
A file format for unformatted, text-only information.

unformatted text files
Files that contain only ASCII text characters (letters, numbers, and symbols) and a few codes such as a *carriage return*. Unformatted files do not contain formatting codes such as *underline* or *bold*.

commands
Instructions to a program that cause an action to be carried out.

EDIT
The DOS command that starts DOS Editor.

What is DOS Editor?

DOS Editor is a **text editor** that provides a way to create **unformatted text files**. Since **batch files**, such as AUTOEXEC.BAT, must be *unformatted text files*, DOS Editor is useful for creating and editing these batch files.

Lesson Six examines DOS Editor and how to use it. Lesson Seven, Automating DOS, examines **batch files** — how they are created with the DOS Editor and how they are used to customize your system.

How does DOS Editor work?

DOS Editor is an **ASCII** editor, and it works with lines instead of paragraphs (it does not *wrap* lines into a paragraph as word processors do). A *line* can be up to 255 characters long in DOS Editor, and it must be ended with a *carriage return* code (created when you press ↵).

DOS Editor provides *menus* on a *menu bar* from which you choose **commands**. **Commands** followed by an ellipsis (...) open a *dialog box* that asks for additional information before completing the original command. Many commands can be activated using *keyboard shortcuts*.

DOS Editor features

DOS Editor lets you use either a mouse or the keyboard to issue commands.

DOS Editor lets you perform basic text editing functions, such as:
- select text
- cut, copy, and paste text
- find and replace text

DOS Editor lets you perform basic file managing tasks, such as:
- create a file
- save a file
- open a file
- print a file

DOS Editor lets you customize the screen display by:
- changing the foreground and background colors
- changing the number of spaces between tab stops (default is 8)
- turning the scroll bars on or off

DOS Editor's Help feature offers on-line help and information on:
- using Help
- using menus and commands
- using a dialog box

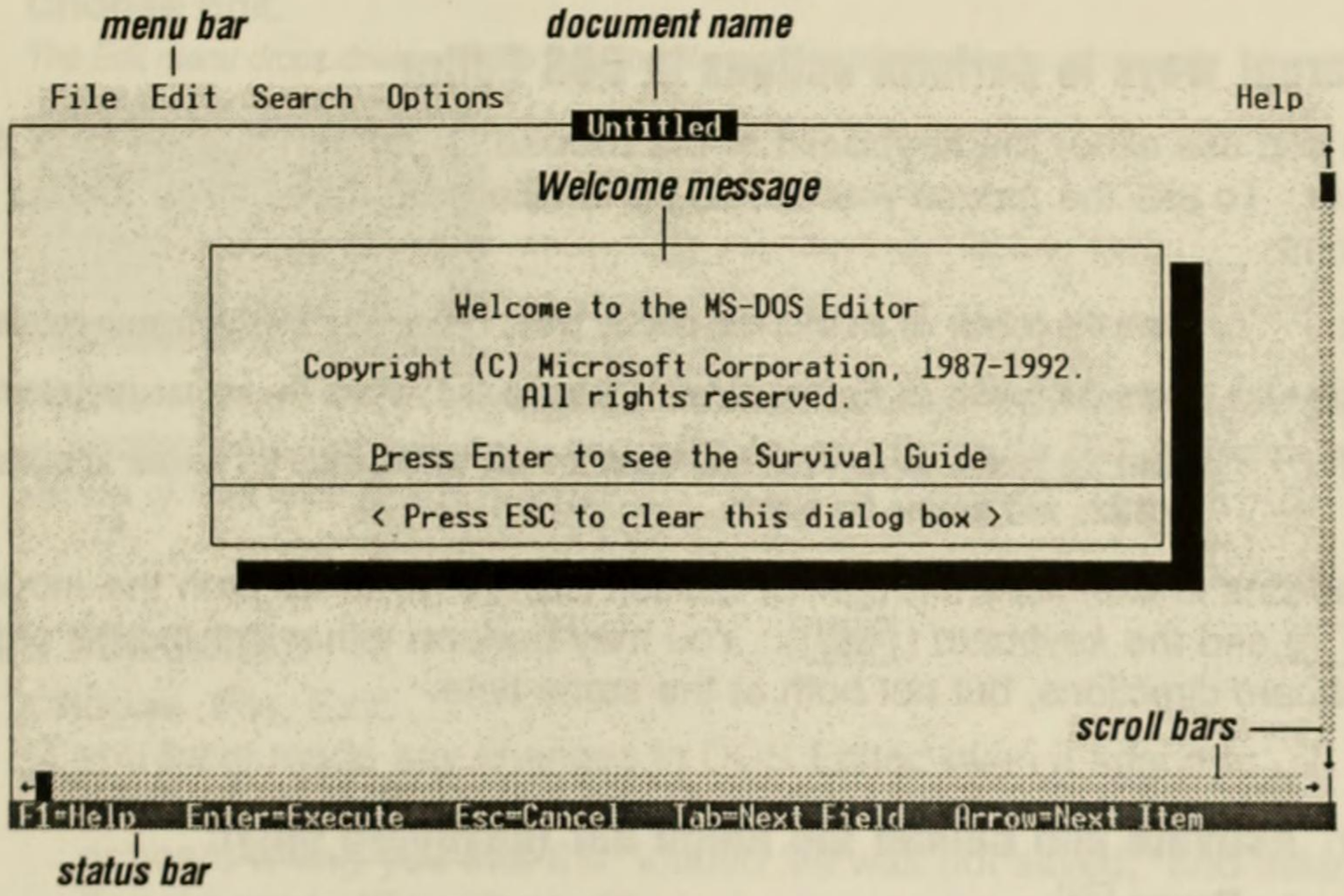
❶ • If necessary, **access** the DUPLICATE Learning Disk on drive A: and **change** to this common DOS prompt: `A:\>`

❷ **Start DOS Editor:**

• **Type** `EDIT` ↵

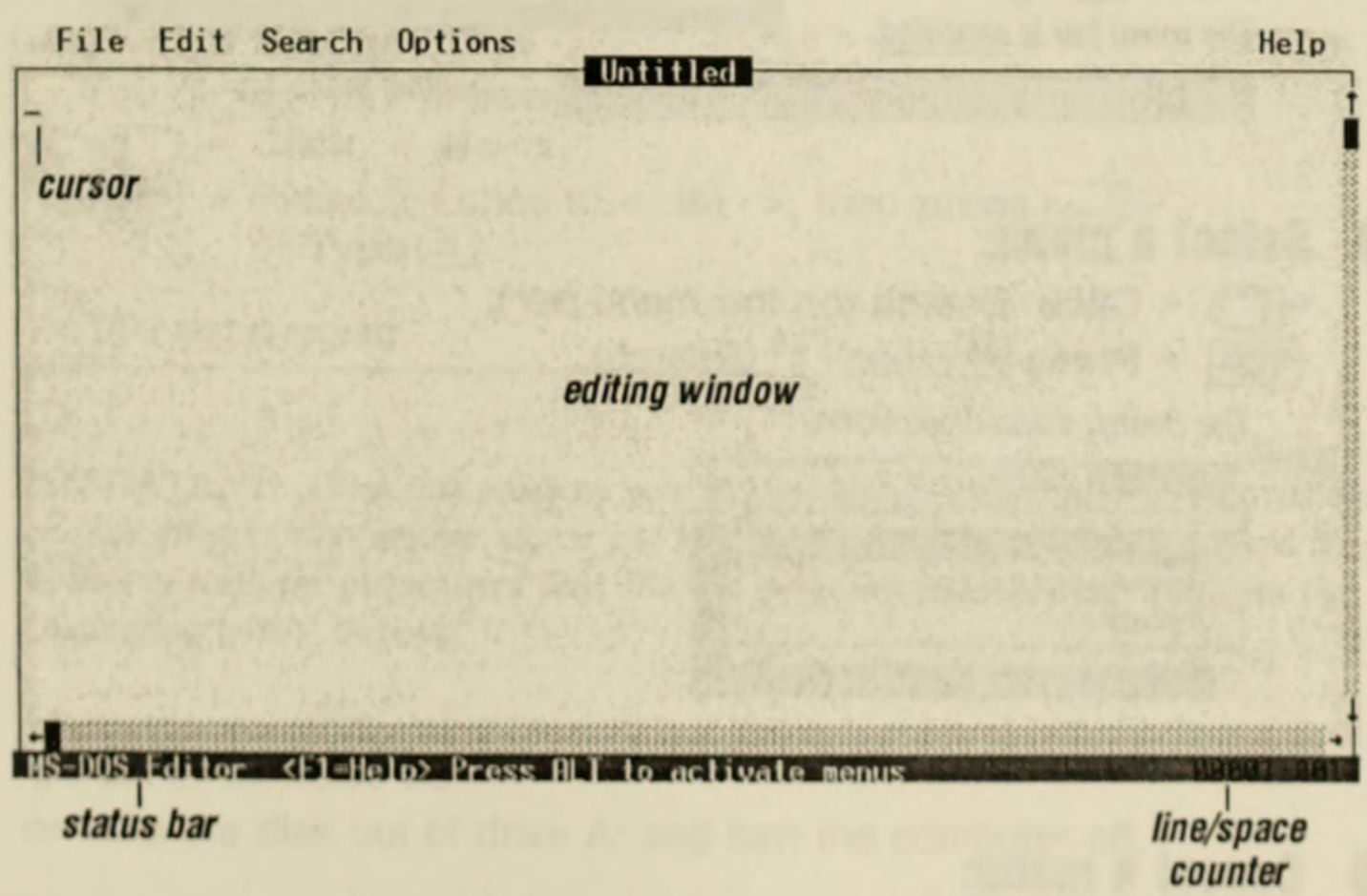
*IMPORTANT: EDIT is an **external command**. If you get a **Bad command or file name** message, C:\DOS is not in the PATH command of your AUTOEXEC.BAT file.*

*The opening DOS Editor screen appears with a **welcome** message displayed in the center of the screen.*



• **Press** Esc *(to clear the dialog box from the DOS Editor screen).*

*The welcome message disappears and the **cursor** appears in the upper left corner of the **editing window**. Notice the changes in the **status bar**.*



❸ • **Go on** to Exercise 54.

EXERCISE 53

Start DOS Editor

To issue the command that begins the DOS Editor program, EDIT.

OBJECTIVES:

- start the DOS Editor program
- examine the DOS Editor screen display
- notice the *menu bar*, *status bar*, and *line/space* counter

– Terms and Notes –

menu bar
The horizontal bar across the top of the DOS Editor screen that displays menus.

status bar
The horizontal bar across the bottom of the DOS Editor screen that displays common commands that are available in the current situation and a line:space counter on the right end when relevant.

scroll bar
A *bar* that may appear at the right and/or bottom edge of a window (or right edge of a list box) that allows you to scroll the window (or list box) when its contents are not fully visible. Each *scroll bar* contains two *scroll arrows* and a *scroll box* (see page 150).

editing window
The work area in DOS Editor. The *editing window* is 256 characters wide, while most monitors display a screen width of about 80 characters.

cursor
A blinking line (or rectangle if you are in typeover mode) that tells you where the next character you type will be displayed.

line/space counter
A gauge that tracks the cursor in DOS Editor. When you start DOS Editor, the counter displays 00001:001, which tells you that the cursor is on space 1 of line 1 (the first number is the *line* number; the second, the *space* number). For example, if you are on space 10 of line 3, the counter will display:

```
00003:010
  ↑   ↑
 line space
number number
```

STEPS to

Start DOS Editor

• Type `EDIT` ↵

EXERCISE 54

Use the menu bar

To select and cancel a menu on the menu bar and to choose a command from a menu.

OBJECTIVES:

- identify the five DOS Editor menus and their commands
- identify three mouse actions
- activate and cancel the menu bar
- select a menu
- cancel a menu
- choose a command
- examine inactive commands
- exit DOS Editor

– Terms and Notes –

NOTE: The mouse may not work in DOS Editor if another program in your computer system has its own special instructions to use the mouse (for example, Windows).

If the mouse does not work, you can try typing MOUSE at the DOS prompt, and then start DOS Editor again. If the mouse still does not work, get advice from a computer expert or use the keyboard to perform actions in DOS Editor.

menu
A list of commands from which you may *choose*.

select
To mark an item so that a subsequent action will activate the item.

cancel
To escape, or back out of, a menu or dialog box without completing a command.

choose
To pick a command that starts an action.

inactive command
A command that cannot be used in the *current* situation. The letter which usually activates the command is not bolded when a command is inactive.

mouse pointer
A small rectangle (▓) in DOS Editor that moves with the mouse as you slide the mouse over a flat surface.

Continue from Exercise 53

Using menus in DOS Editor

The five DOS Editor menus and their commands are shown below (the bold, underlined keys indicate the letter which activates each menu or command):

FILE	EDIT	SEARCH	OPTIONS	HELP
New	Cut	Find...	Display...	Getting Started
Open...	Copy	Repeat Last Find	Help Path...	Keyboard
Save	Paste	Change...		About...
Save As...	Clear			
Print...				
Exit				

Different ways to perform actions in DOS Editor

You can use either the **keyboard** or the **mouse** to perform actions in DOS Editor. To use the *mouse* you should be familiar with these three *mouse* actions:

Click — Move the pointer on an item and quickly press and release the left mouse button.

Double-click — Move the pointer on an item and quickly press and release the left mouse button *twice*.

Drag — Move the pointer on an item, hold down the left button, slide the mouse to a new location, and release the button.

Directions in exercises throughout Lesson Six are given for both the *mouse* (🖱) and the *keyboard* (⌨). You may perform either the *mouse* or the *keyboard* directions, but not both at the same time.

❶ Activate and cancel the menu bar (keyboard only):

- **Press** Alt

The menu bar becomes active.

File Edit Search Options — *active menu bar*

- **Press** Alt again.

The menu bar is canceled.

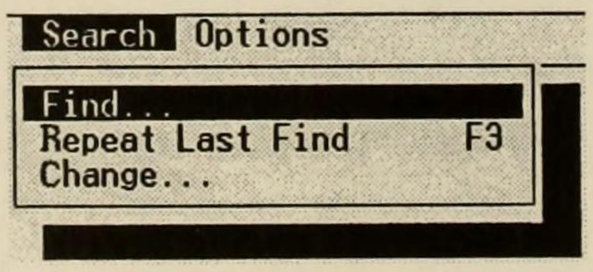
File Edit Search Options — *inactive menu bar*

❷ Select a menu:

🖱 • **Click** Search (on the *menu bar*).

⌨ • **Press** Alt, then S (Search).

The Search menu drops down.



❸ Cancel a menu:

🖱 • **Click** Search (or anywhere outside the menu).

⌨ • **Press** Alt, Alt

The menu and menu bar are canceled.

Exercise 54 continued...

❹ Choose a command:

- **Click** Help, then Keyboard.
- **Press** Alt, H (Help), K (Keyboard).

*The Help Keyboard window appears, and the **editing window** moves below the Help window.*

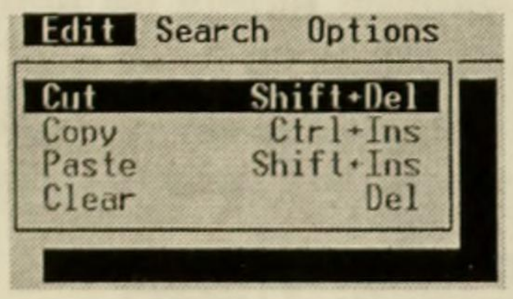
- **Click** < Esc=Cancel > (located at bottom of screen).
- **Press** Esc

The Help Keyboard window disappears.

❺ Examine inactive commands:

- **Choose** Edit.

The Edit menu drops down. Notice that no letters are highlighted in the commands.

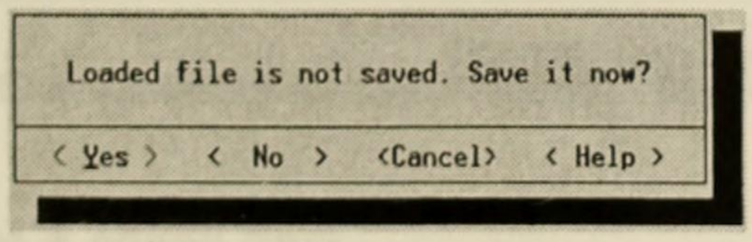


*NOTE: When no letter is highlighted in a menu command, that means the command is inactive (cannot be used in the current situation). To use the Edit commands, a section of **text** must first be **selected**.*

❻ Exit DOS Editor:

- **Choose** File, Exit.

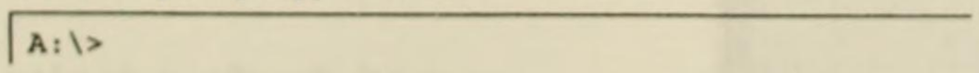
IF you have made any changes in DOS Editor, even a space or carriage return that you cannot see, the following dialog box appears telling you that the "loaded file was not saved," and asking if you want to "Save it now?"



You do not want to save it.

- **Click** < No >.
- **Press** Tab once to < No >, then **press** ↵ or **Type** N

The DOS prompt appears.



*IMPORTANT: From this point on you will usually be given **general** instructions to **choose commands** (neither mouse nor keyboard) the way it is shown in steps 5 and 6, that is, with the menu listed first and the command listed second, and with the "activating letter" in bold.*

❼

- **Go on** to Exercise 55
  or **take** the disk out of drive A: and turn the computer off.

STEPS to

Select a menu

- **Click** the menu you want on the menu bar.

Choose a command

1 **Click** the menu you want.
2 **Click** the command you want.

Exit DOS Editor

- **Click** File, Exit.

STEPS to

Activate/cancel the menu bar

- **Press** Alt

  *NOTE: Alt is a "toggle" which **activates** an inactive menu bar and **cancels** an active menu bar.*

Select a menu

1 **Activate** the menu bar (see above).
2 **Type** the *highlighted* letter of the menu you want.

Choose a command

1 **Select** a menu (see above).
2 **Type** the *highlighted* letter of the command you want.

Exit DOS Editor

- **Press** Alt, F (File), X (Exit).

EXERCISE 55

Use dialog boxes

To use various methods to specify information in dialog boxes.

OBJECTIVES:

- identify five ways a dialog box asks for additional information
- open a dialog box
- cancel a dialog box
- move in a dialog box and choose a command button
- select an option button
- select a check box
- deselect a check box
- type information in a text box
- complete the original command
- scroll a list box
- select an item in a list box
- change DOS Editor colors

- Terms and Notes -

dialog box
A box that appears when a *menu command* with an ellipsis (...) is chosen. A dialog box requests additional information before completing the original command.

text box
A box in a dialog box that provides space to type the information needed to carry out a command.

list box
A box in a dialog box that provides a list of options from which one item may be selected.

check boxes
Squares next to items in a dialog box from which you may select as many items as you want.

option buttons
Circles next to items in a dialog box from which you may select *only one item of a related group.*

command button
Brackets that hold a word that will carry out a command when chosen.

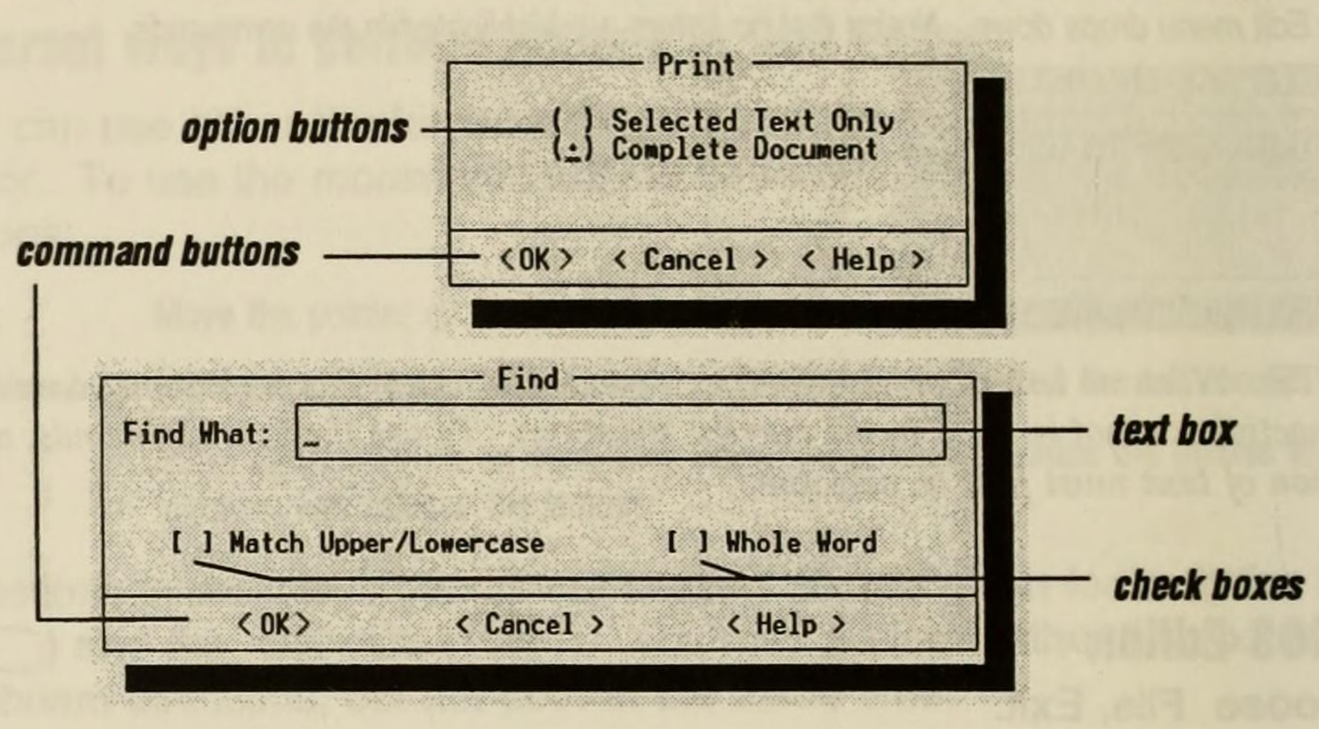
deselect
To *unmark* an item so that a future action will *not* activate the item.

Using dialog boxes in DOS Editor

A dialog box is opened whenever a menu command that is followed by an ellipsis (...) is chosen. Dialog boxes use *five* methods to request additional information before you complete the original command.

Dialog boxes use	that
text boxes	provide space for typing information
list boxes	display a list of items from which you may *select* one item
check boxes	are [ ] by items from which you may *select* any or all
option buttons	are ( ) by items from which you may *select* only one of a group
command buttons	are < > that hold a command you can *choose*

Below are two dialog boxes that contains four of the five elements listed above (a dialog box with a **list box** is shown in the illustration in step 13):



1. • If necessary, **access** the DUPLICATE Learning Disk on drive A: and **change** to this common DOS prompt: `A:\>`

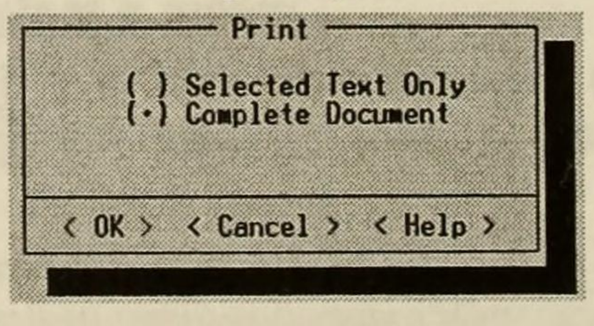
2. • **Start** DOS Editor (review, Exercise 53).

3 Open a dialog box:

(choose a command with an ellipsis (...))

- **Choose** File, Print... .

The Print dialog box opens.



4 Cancel a dialog box:

- **Click Cancel.**
- **Press** Esc

5. • **Choose** File, Print... again.

The Print dialog box opens again.

Exercise 55 continued...

6 Move within a dialog box and choose a command button:

- **Click** the < Help > command button.
- **Press** Tab to reach the < Help > command button.
- **Press** ↵ or H (Help).

The "HELP: Print Dialog" window appears.

Exit the "HELP: Print Dialog" window:

- **Click** < OK >.
- **Press** Esc or ↵

The HELP window disappears, and the Print dialog box reappears.

7 Select an option button:

- **Click** on *option button* by **S**elected Text Only.
- **Press** Tab to reach the *option button* section.
- **Press** ↑ to reach the *option button* by **S**elected Text Only.
  or
  Press S (**S**elected Text Only).

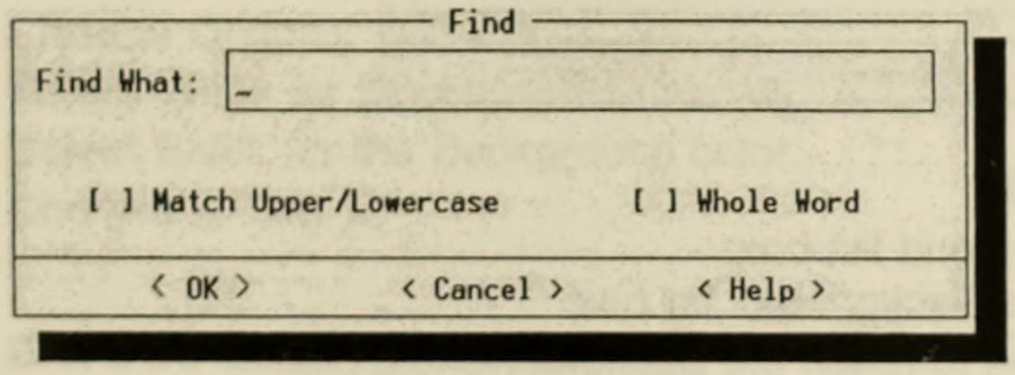
*The **dot** moves to the option button by **S**elected Text Only.*

- **Press** Esc to *cancel* the Print dialog box.

8

- **Choose** Search, **F**ind.

The Find dialog box opens.



9 Select a check box:

- **Click** [ ] by **M**atch Upper/Lowercase.
- **Press** Tab to reach the [ ] by **M**atch Upper/Lowercase, and then **press** Space

An X appears in the check box.

10 Deselect a check box:

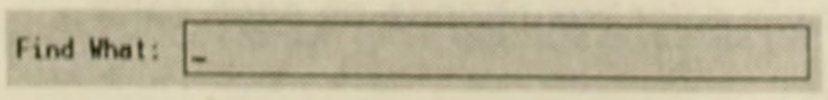
- **Click** [X] by **M**atch Upper/Lowercase.
- **Press** Space

The X disappears from the check box.

11 Type information in a text box:

- **Click** in the box by **F**ind What.
- **Press** Alt (command letters are highlighted), and then **press** F (**F**ind What).

The cursor moves inside the text box.



- **Type** none

Exercise 55 continued...

Exercise 55 (continued)
Use dialog boxes

NOTE: There are several different ways to *move* within a dialog box using the keyboard.

Press	to
Tab	move forward through the dialog box
Shift + Tab	move backwards through the dialog box
Alt	highlight the "selecting" letters of items in dialog box
highlighted letter	move to the item whose letter you chose.

(You must press Alt + letter if you are in a text box or list box where a letter by itself might be misunderstood.)

STEPS to

Open a dialog box
1 **Click** a menu on the menu bar.
2 **Click** a command with an ellipsis (...).

Cancel a dialog box
(and any changes you made in it)
- **Click** the **Cancel** command button.

Move within a dialog box
- **Click** the item you want.

Type information in a text box
1 **Click** the text box you want.
2 **Type** the information you want.

Select an item in a list box
1 **Click** the *scroll bar arrows* until the item you want appears.
2 **Click** the item you want.

Select/deselect a check box
- **Click** the check box by the item you want to select or deselect.
  NOTE: The item is selected when an X is present, and deselected when the box is empty.

Select an option button
- **Click** the option button by the one item you want in the group of options.

Choose a command button
- **Click** the desired command button.

Complete original command
- **Click** the **OK** command button.

STEPS to

Keyboard STEPS are on the next page.

STEPS to

Open a dialog box
1 **Press** Alt
2 **Type** the highlighted letter in the menu name you want.
3 **Type** the highlighted letter in the command (with an ellipsis (...)) you want.

Cancel a dialog box
(and any changes you made in it)
- **Press** Esc

Move within a dialog box
- **Press** Tab to move forward,
  or
  press Shift + Tab to move backwards.

Type information in a text box
1 **Press** Tab until you move to the text box you want.
2 **Type** the information you want.

Select an item in a list box
1 **Press** Tab until you move to the list box.
2 **Press** ↓ or ↑ until the item you want is highlighted.

Select/deselect a check box
1 **Press** Tab until the cursor moves to the check box by the item you want.
2 **Press** Space to select or deselect the item.
NOTE: The item is selected when an X is present, and deselected when the box is empty.

Select an option button
1 **Press** Tab until the cursor is in the option button area.
2 **Press** ↓ or ↑ until the dot moves to the item you want.

Choose a command button
1 **Press** Tab until the cursor moves to the command button you want.
2 **Press** ↵

Complete original command
1 **Press** Tab until the cursor moves to the **OK** command button.
*NOTE: SKIP this step if the OK command button is already **selected**.*
2 **Press** ↵

⑫ Complete the original command:
(choose OK so the original command, along with the additional information in the dialog box, is carried out)

- **Click** < OK >.
- **Press** ↵ (unless you change it, OK stays *selected* so when you press Enter, OK is *chosen*).

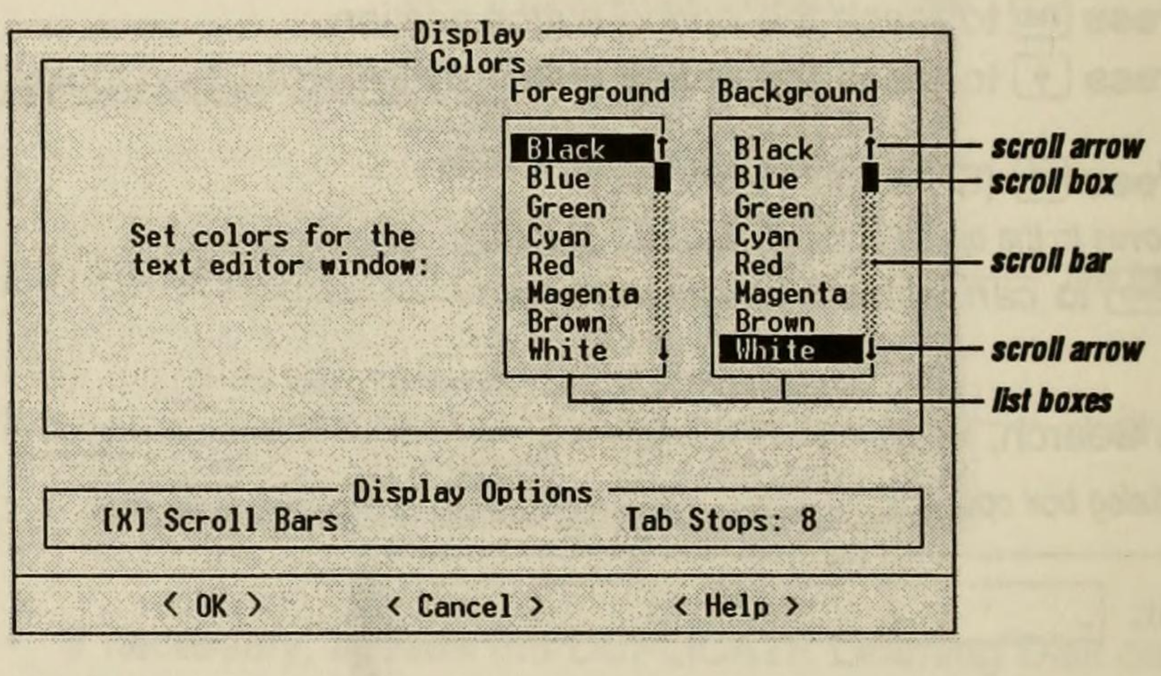
Since there is no text to find, a small dialog box appears saying "match not found."

- **Click** < OK > again.
- **Press** ↵ again.

The small dialog box disappears.

⑬ Choose Options, Display... .

The Display dialog box opens with three display items that can be changed: foreground and background colors, scroll bars, and tab stops.



⑭ Scroll a list box:

Select the Background list box:

- **Click** the Background *list box*.
- **Press** Tab to reach the Background *text box*.
  or
  Press Alt + B (Background).

*The cursor moves to the Background **text box**.*

- **Click** the bottom *scroll arrow* until the *scroll box* moves to the bottom of the *scroll bar*.
- **Press** ↓ to reach the bottom of the *list box*, and watch the colors in the *sample color* box change as each color is highlighted.
  NOTE: The screen colors displayed depend on the type of monitor you have.
- **Press** ↑ to reach the top of the list of colors.

*The Background color is **Black**.*

Select the Foreground list box:

- **Click** the Foreground *list box*.
- **Press** Shift + Tab once to the Foreground *text box*.
  or
  Press Alt + F (Foreground).

*The cursor moves to the Foreground **text box**.*

- **Click** the top *scroll arrow* until the *scroll box* moves to the top of the *scroll bar*.
- **Press** ↓ to reach the bottom of the *list box*, and watch the colors in the *sample color* box change as each color is highlighted.
- **Press** ↑ to reach the top of the list of colors.

*The Foreground color is **Black**, so the sample color box is now entirely black.*

Exercise 55 continued...

⑮ Select an item in a list box:

- **Click Cyan** in the Background *list box*.
- **Press** Alt + B (**B**ackground).
- **Press** ↓ or ↑ until **Cyan** is highlighted.

- **Click Blue** in the Foreground *list box*.
- **Press** Alt + F (**F**oreground).
- **Press** ↓ or ↑ until **Blue** is highlighted.

Notice the color combination in the Sample Color box.

⑯ Complete the original command:

- **Click** < OK >.
- **Press** ↵

⑰ Change DOS Editor colors:

- **Choose** **O**ptions, **D**isplay... again.
- **Select** various combinations of Background and Foreground colors and notice the colors in the *sample color* box.
- **Choose** < OK > when you are happy with the colors.

⑱ Change DOS Editor colors to the original colors:

- **Choose** **O**ptions, **D**isplay... .
- **Select** White for the Foreground color.
- **Select** Black for the Background color.
- **Choose** < OK >.

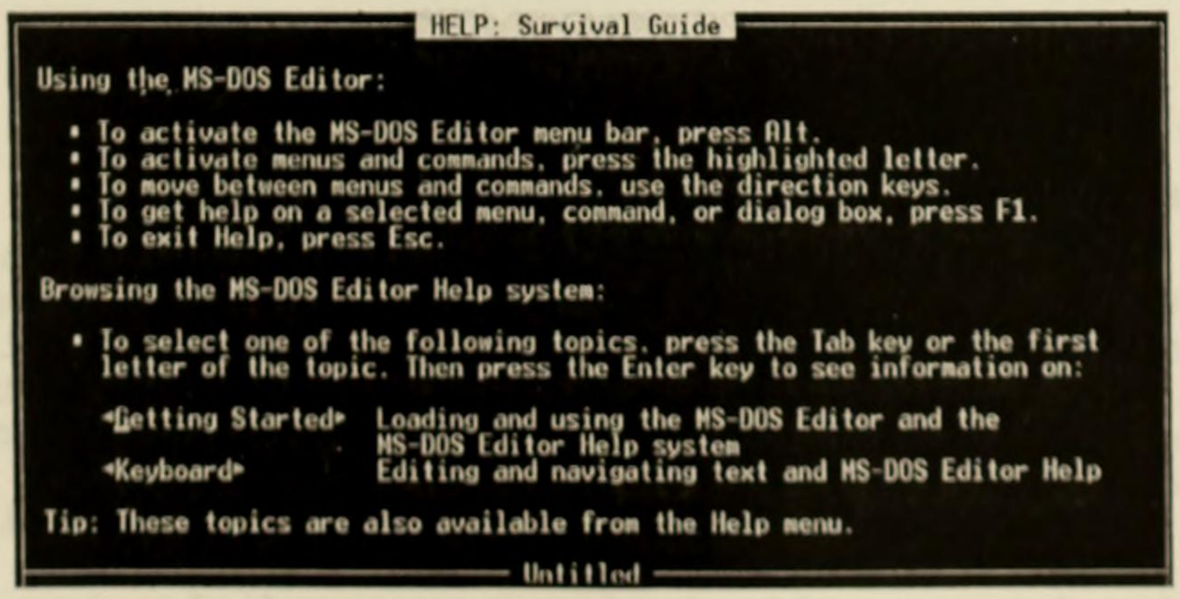
⑲ • **Exit** DOS Editor (review, Exercise 54, step 6).

⑳ • **Start** DOS Editor (review, Exercise 53).

㉑ Access the HELP Survival Guide:

- **Press** F1

The HELP: Survival Guide window appears.



㉒ • **Exit** DOS Editor (you do not have to cancel HELP first).

㉓ • **Go on** to Exercise 56
or **take** the disk out of drive A: and turn the computer off.

EXERCISE 56

Create a text file

To type text in DOS Editor.

OBJECTIVES:

- create a text file
- clear the screen and start a *new* (clear) editing window

❶ • If necessary, **access** the DUPLICATE Learning Disk on drive A: and **change** to this common DOS prompt: `A:\>`

❷ • **Start** DOS Editor and clear the Welcome dialog box (review, Exercise 53).

❸ Create a text file:

- **Type** the following text without pressing ↵ (Space twice after periods):

```
The first line you are going to type in DOS Editor
will be 256 characters long.  Look at the line/space
counter at the bottom right corner of the screen.
The far right side is counting the space number that
the cursor is on.  It is now on about space 256
```

- **Press** ↵

The cursor moves to the beginning of the second line.

- **Type** the following text without pressing ↵:

```
When the cursor reaches the right edge of the screen,
the window starts to scroll so you can see what you
type, and the scroll box in the bottom scroll bar
moves to indicate where the cursor is in relation to
the entire width of the window.
```

- **Press** ↵

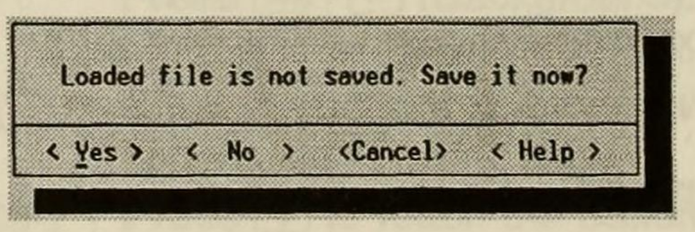
The cursor moves to the beginning of the third line.

NOTE: You will probably not need to use the full 256-character line, but it is useful to understand how long a line can be in DOS Editor.

❹ Clear the screen and start a new (clear) editing window:

- **Choose** File, New.

A dialog box appears to warn you that the file is not saved; and asks if you want to "Save it now?".



- **Choose** < No >.

*The **editing window** is cleared and the cursor appears in the top left corner (on line 1, space 1).*

❺ Create a text file:

- **Type** the following text, pressing ↵ where indicated:

```
DOS Editor is a text editor that works with lines
instead of paragraphs (it ↵ does not wrap lines
into a paragraph as a word processor does).  A line
can ↵ be up to 256 characters long in DOS Editor.
Lines must be ended with a ↵ "carriage return code,"
which is created when you press Enter. ↵ ↵
DOS Editor provides menus on a menu bar from which
you "choose" commands. ↵ Commands that are
followed by an ellipsis (...) open a dialog box that
↵ asks for additional information.  When you are
satisfied with the information ↵ in the dialog box,
"choose" < OK > to complete the original command.
```

❻ • **Go on** to Exercise 57 (Print a text file).

STEPS to

Create a text file

- **Type** the text you want in the DOS Editor editing window.

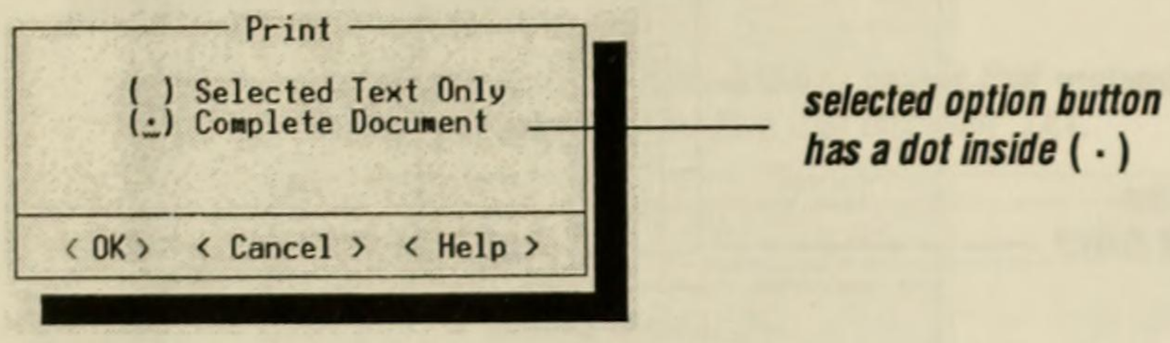
Continue from Exercise 56

❶ Get ready to print:

- **Be sure** the printer is turned on and ready to receive information.

❷ Send text to the printer:

- **Choose** File, Print.
  The Print dialog box appears, and the Complete Document option button is selected.



- **Choose** < OK >.

❸ Force the printer to "feed" your paper:

NOTE: DOS Editor's Print command does not send a "page feed" code to the printer.

- **Turn** the "on line" light off (it is located on your printer).
- **Press** the "form feed" button (located on your printer).
- **Turn** the "on line" light back on.

```
DOS Editor is a text editor that works with lines instead of paragraphs (it
does not wrap lines into a paragraph as a word processor does).  A line can
be up to 256 characters long in DOS Editor.  Lines must be ended with a
"carriage return code," which is created when you press Enter.

DOS Editor provides menus on a menu bar from which you "choose" commands.
Commands that are followed by an ellipsis (...) open a dialog box that
asks for additional information.  When you are satisfied with the information
in the dialog box, "choose" < OK > to complete the original command.
```

❹

- **Go on** to Exercise 58 (Save a text file).

EXERCISE 57

Print a text file

To print a copy of the text in the DOS Editor editing window.

OBJECTIVES:

- get ready to print
- send text to the printer
- force the printer to "feed" your paper

– Terms and Notes –

WARNING: DOS Editor sends ASCII text to the printer connected to LPT1 (the parallel printer port). To use the Print command, you must have a printer connected to (or redirected through) your LPT1 parallel port.

NOTE: To print a *section* of your document instead of the entire document:

1 **Select** the *section* to print (see Exercise 61).
2 **Choose** File, Print.
3 **Select** the *Selected Text Only* option button.
4 **Choose** < OK >.

STEPS to

Print a text file

1 **Be sure** the printer is ready to receive data.
2 **Choose** File, Print.
3 **Choose** < OK >.
4 **Turn** the "on line" light off.
5 **Press** the "form feed" button.
6 **Turn** the "on line" light back on.

EXERCISE 58

Save a text file

To store the text in DOS Editor on a disk.

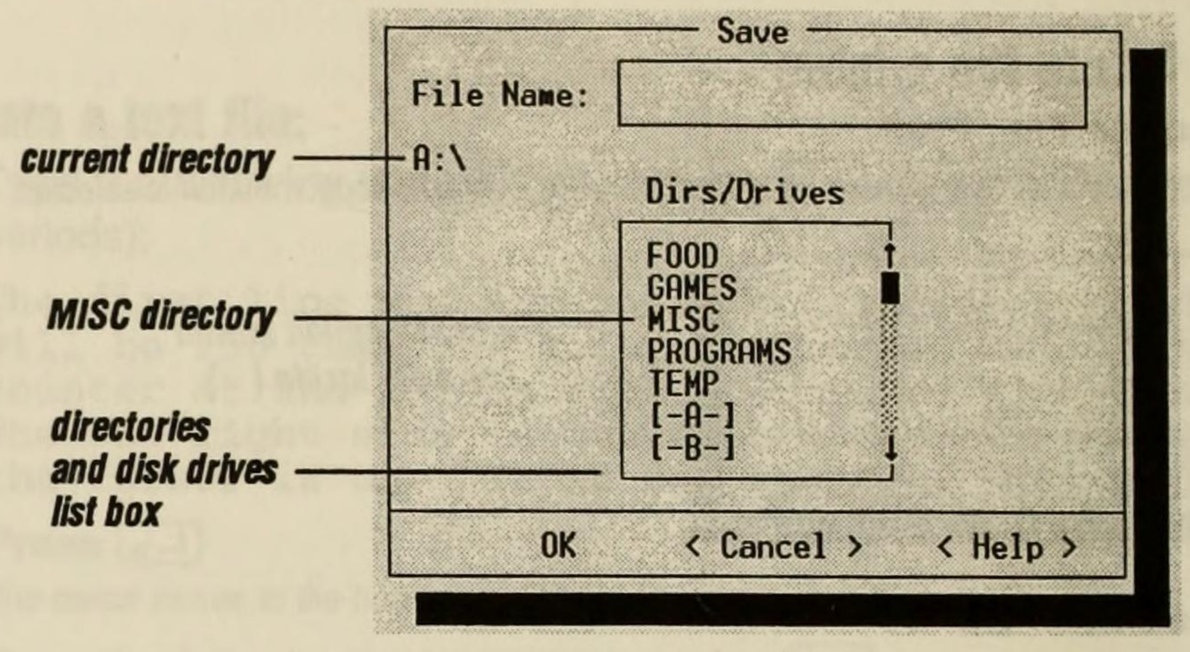
OBJECTIVES:

- choose the SAVE command
- choose a directory in which to save your text file
- type a filename in the text box and complete the command

Continue from Exercise 57

❶ Choose the SAVE command:

- **Choose** File, Save.
  The Save dialog box appears.

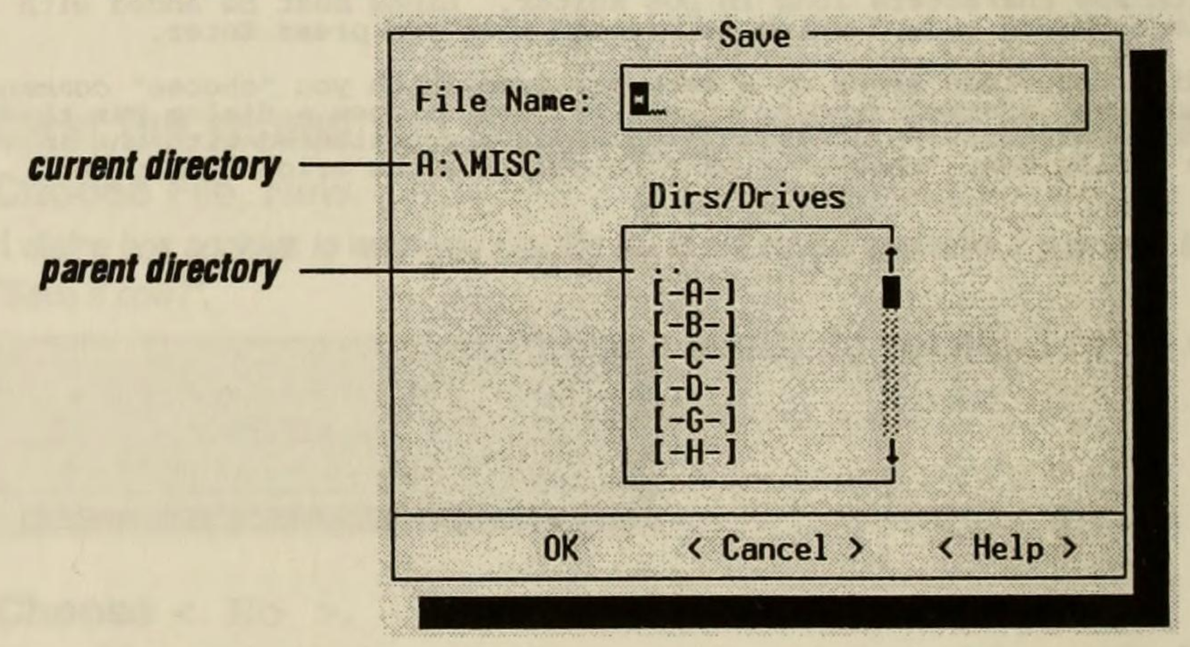


❷ Choose a directory in which to save your text file:

(choose the MISC directory)

- **Double-click** on the MISC directory.
- **Press** Tab once to the *Dirs/Drives* list box.
- **Press** ↓ to reach the MISC directory, and then **press** ↵

*The **current** directory changes to **A:\MISC**, the **parent** directory symbol (..) appears at the top of the **Dirs/Drives** list, and the cursor appears in the File Name text box (and this highlighted asterisk (*) appears also if you use keyboard instructions).*



❸ Type a filename in the text box and complete the command:

Highlighted text in a *text box* will disappear when you begin typing.

- **Type** EDITOR
- **Choose** < OK >.
  The file is saved in the MISC directory on drive A:.

❹ Clear the screen:

- **Choose** File, New.
  Since you just saved the text in the editing screen, the screen should be cleared and the cursor returned to line 1, space 1.

❺

- **Exit** DOS Editor.

❻

- **Go on** to Exercise 59
  or **take** the disk out of drive A: and turn the computer off.

STEPS to

Save a text file

1 **Type** the text you want in DOS Editor.
2 **Choose** File, Save.
3 **Choose** a directory to save your file in, **IF** desired.
4 **Type** the filename for the text in the File Name text box.
5 **Choose** < OK >.

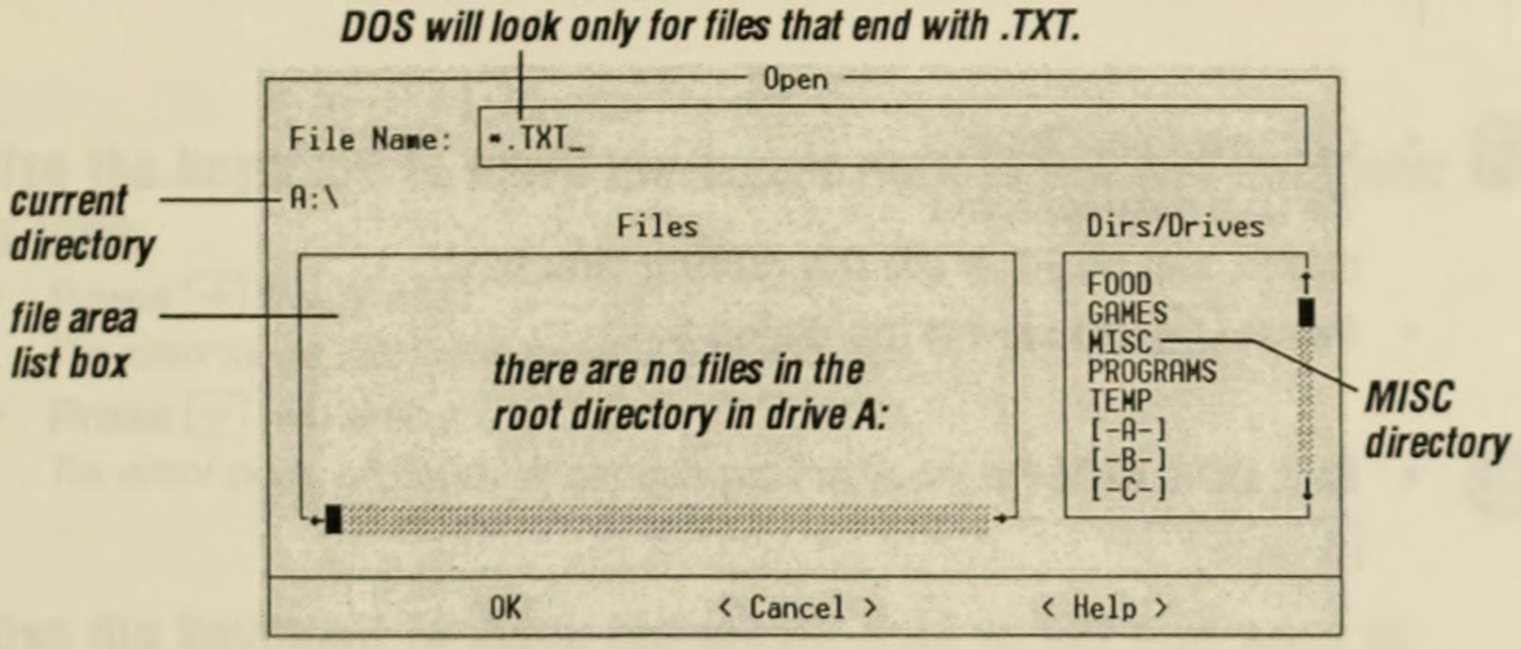
1. • If necessary, **access** the DUPLICATE Learning Disk on drive A: and **change** to this common DOS prompt: `A:\>`

2. • **Start** DOS Editor and clear the dialog box (review, Exercise 53).

3. **Choose the OPEN command:**

   • **Choose** File, Open.

   The Open dialog box appears.



4. **Change the filename pattern in the text box:**

   (change it so *all* files in the *current* directory will be displayed)

   • **Press** BkSp three times (to delete TXT).

   • **Type** * (so the filename pattern reads *.*).

   *Nothing changes in the **files** area because there are **no** files in the root directory.*

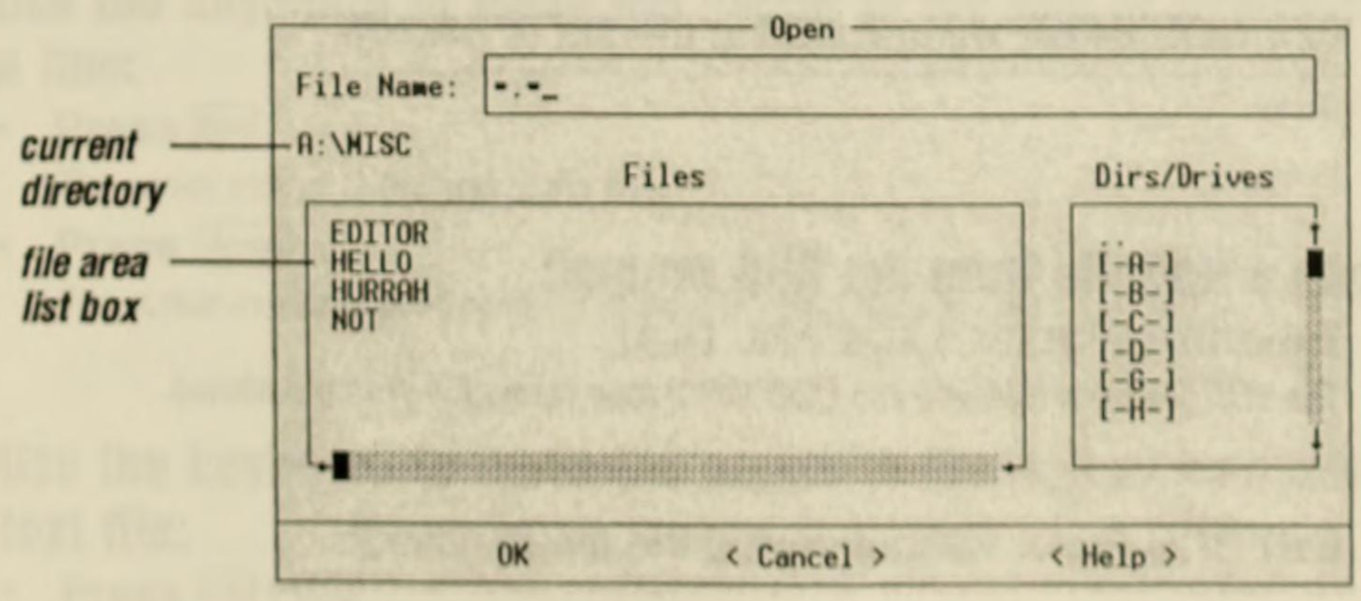
5. **Select a directory:**

   (select the MISC directory since it holds the EDITOR file)

   • **Double-click** on the MISC directory.

   • **Press** Tab once to reach the *Dirs/Drives* area.

   • **Press** ↓ to reach the MISC directory, and then **press** ↵



Exercise 59 continued...

EXERCISE 59

Open a text file

To retrieve a text file into DOS Editor.

OBJECTIVES:

- choose the OPEN command
- change the filename pattern in the text box
- select a directory
- select a filename and complete the original command (open a *text file*)
- open a *text file* by typing its path and name in the text box
- open a *text file* from the DOS prompt

STEPS to

Open a text file by selecting it from the list of files

From within DOS Editor:

1 **Click** File, Open.
2 **Type** * . * in the text box.
3 **Double-click** the **directory** that holds the file you want (in the Dirs/Drives list box).
   The file you want appears in the Files list box, along with the names of all other files in the directory.
4 **Double-click** the filename you want (in the Files list box).

Open a text file by typing its path and name in a text box

From within DOS Editor:

1 **Click** File, Open.
2 **Type** the filename of the text file you want to open (including the path, if necessary).

Open a text file from the DOS prompt

From the DOS prompt:

1 **Type** `EDIT`
2 **Press** Space
3 **Type** the filename of the text file you want to open (including the path, if necessary).

STEPS to

Keyboard STEPS are on the next page.

❻ Choose a file:

- **Double-click** on EDITOR (in the *Files* area).
- **Press** Tab once to the *Files* area.
- **Press** ↓ to highlight EDITOR, and then **press** ↵

The EDITOR file is retrieved into DOS Editor.

```
DOS Editor is a text editor that works with lines instead of paragraphs (it
does not wrap lines into a paragraph as a word processor does).  A line can
be up to 256 characters long in DOS Editor.  Lines must be ended with a
"carriage return code," which is created when you press Enter.

DOS Editor provides menus on a menu bar from which you "choose" commands.
Commands that are followed by an ellipsis (...) open a dialog box that
asks for additional information.  When you are satisfied with the information
in the dialog box, "choose" < OK > to complete the original command.
```

❼

- **Choose** File, Open.

  The Open dialog box opens.

  Notice that MISC is still the *current* directory.
- **Press** Esc (to cancel the dialog box).

❽

- **Exit** DOS Editor without saving the file (if asked).

```
A:\>
```

❾

- **Start** DOS Editor again and clear the dialog box.

❿ Open a text file by typing its path and name in the text box:

- **Choose** File, Open.

  *The Open dialog box opens, and again, *.TXT is highlighted in the text box.*

  File Name: *.TXT

  Notice that the *root* directory is the *current* directory.
- **Type** MISC\EDITOR ↵

  NOTE: Highlighted text in a ***text box*** *will disappear when you begin typing.*
  NOTE: You could also have typed "\MISC\EDITOR" or "A:\MISC\EDITOR" in the ***text box****, but since you can see that the current directory is A:\ (the root directory on drive A) you need only type the path from the root, i.e., MISC\EDITOR*

  The EDITOR file is retrieved into DOS Editor (see illustration in step 6 above).

⓫

- **Exit** DOS Editor without saving the file (if asked).

```
A:\>
```

⓬ Open a text file from the DOS prompt:

- **Type** EDIT MISC\EDITOR ↵

  The EDITOR file is retrieved into DOS Editor (see illustration in step 6 above).

⓭

- **Exit** DOS Editor without saving the file (if asked).

⓮

- **Go on** to Exercise 60

  or **take** the disk out of drive A: and turn the computer off.

STEPS to

Open a text file by selecting it from a list of files

From within DOS Editor:

1 **Press** Alt, F (File), O (Open).
2 **Type** * . * in the text box.
3 **Press** Tab to the Dirs/Drive list box.
4 **Press** ↓ until the directory that holds the text file you want is highlighted.
5 **Press** ↵
6 **Press** Tab to the Files list box.
7 **Press** ↓ until the filename of the text file you want is highlighted.
8 **Press** ↵

Open a text file by typing its path and name in the text box

From within DOS Editor:

1 **Press** Alt, F (File), O (Open).
2 **Type** the filename of the text file you want to open (including the path, if necessary).
3 **Press** ↵

Open a text file from the DOS prompt

From the DOS prompt:

1 **Type** EDIT
2 **Press** Space
3 **Type** the filename of the text file you want to open (including the path, if necessary).
4 **Press** ↵

EXERCISE 60

Move the cursor

To position the cursor at various locations in the editing window using the keyboard or the mouse.

OBJECTIVES:

- use the keyboard to move the cursor:
  - right or left one *character* at a time
  - right or left one *word* at a time
  - down or up one *line* at a time
  - to the *end or beginning of a text on a line*
  - to the *end or beginning of a text file*
  - right or left one screen at a time
- identify parts of a scroll bar
- use the mouse to:
  - move the cursor around on the screen
  - scroll the window one screen at a time
  - scroll the window by dragging the scroll box
  - scroll the window one character at a time

❶ • If necessary, **access** the DUPLICATE Learning Disk on drive A: and **change** to this common DOS prompt: `A:\>`

❷ • **Type** `EDIT MISC\EDITOR` ↵

The EDITOR file is retrieved into DOS Editor with the cursor on line 1, space 1.

```
DOS Editor is a text editor that works with lines instead of paragraphs (it
does not wrap lines into a paragraph as a word processor does).  A line can
be up to 256 characters long in DOS Editor.  Lines must be ended with a
"carriage return code," which is created when you press Enter.

DOS Editor provides menus on a menu bar from which you "choose" commands.
Commands that are followed by an ellipsis (...) open a dialog box that
asks for additional information.  When you are satisfied with the information
in the dialog box, "choose" < OK > to complete the original command.
```

❸ Use the keyboard to move the cursor right or left one character at a time:

- **Press** → five times.
  The cursor moves right five characters.
- **Press** ← five times.
  The cursor moves left five characters and returns to line 1, space 1.

❹ Use the keyboard to move the cursor right or left one word at a time:

- **Press** Ctrl + → five times.
  *The cursor moves to the beginning of the **next** word five times.*
- **Press** Ctrl + ← five times.
  *The cursor moves to the beginning of the **previous** word five times and returns to line 1, space 1.*

❺ Use the keyboard to move the cursor down or up one line at a time:

- **Press** ↓ five times.
  The cursor moves down five lines.
- **Press** ↑ five times.
  The cursor moves up five lines and returns to line 1, space 1.

❻ Use the keyboard to move the cursor to the end or beginning of a line:

- **Press** End
  The cursor moves to the end of the line.
- **Press** Home
  The cursor moves to the beginning of the line and returns to line 1, space 1.

❼ Use the keyboard to move the cursor to the end or beginning of a text file:

- **Press** Ctrl + End
  The cursor moves to the end of the text file.
- **Press** Ctrl + Home
  The cursor moves to the beginning of the text file and returns to line 1, space 1.

Exercise 60 continued...

STEPS to

Move the cursor

to move	press
character right	→
character left	←
word right	Ctrl + →
word left	Ctrl + ←
line down	↓
line up	↑
to end of line	End
to beginning of line	Home
to beginning of next line	Ctrl + ↵
to end of file	Ctrl + End
to beginning of file	Ctrl + Home
screen right	Ctrl + PgDn
screen left	Ctrl + PgUp

NOTE: WordStar cursor movement keys can also be used in DOS Editor.

STEPS to

Mouse STEPS are on the next page.

Exercise 60 (continued)
Move the cursor

- Terms and Notes -

mouse pointer
A small rectangle (▓) in DOS Editor that moves with the mouse as you slide the mouse over a flat surface.

scroll bar
A *bar* that may appear at the right and/or bottom edge of a window (or right edge of a list box) that allows you to scroll the window (or list box) when its contents are not fully visible.
Each *scroll bar* contains two *scroll arrows* and a *scroll box.*

scroll arrow
The arrow at each end of a scroll bar, used to *scroll* through the contents of a window.

scroll box
A small box in a scroll bar that shows the position of the information *displayed* in a window in relation to the *entire contents* of the window.

STEPS to

Move the cursor to a specific location on the screen
- **Click** the location you want.

Scroll the editing window one screen at a time
- **Click** immediately before the scroll arrow in the direction you want to scroll the window.

Scroll the editing window one character at a time
- **Click** the scroll arrow in the direction you want to scroll the window.

Scroll the editing window by dragging the scroll box
- **Drag** the scroll box to the location on the bar that is relative to the location you want to move the window.
  For example, if you want to move to the middle of the text file, move the scroll box to the middle of the scroll bar.

8
- **Move** the cursor to the end of the text file (review, step 7).
- **Type** the following text <u>without</u> pressing [↵]:

```
The first line you are going to type in DOS Editor
will be 256 characters long.  Look at the line/space
counter at the bottom right corner of the screen.
The far right side is counting the space number that
the cursor is on.  It is now on about space 256
```

- **Press** [↵]
  The cursor moves to the beginning of the next line.
- **Move** the cursor up one line so it is at the beginning of the line you just typed.

9 **Use the keyboard to move the cursor right and left one screen at a time:**
- **Press** [Ctrl]+[PgDn]
  *The window scrolls one right one screen and displays the text below. The **space counter** displays 079.*

```
.  Look at the line/space counter at the bottom right corner of the screen.  T
```

- **Press** [Ctrl]+[PgDn] again.
  *The window scrolls one right one screen and displays the text below. The **space counter** displays 157.*

```
he far right side is counting the space number that the cursor is on.  It is n
```

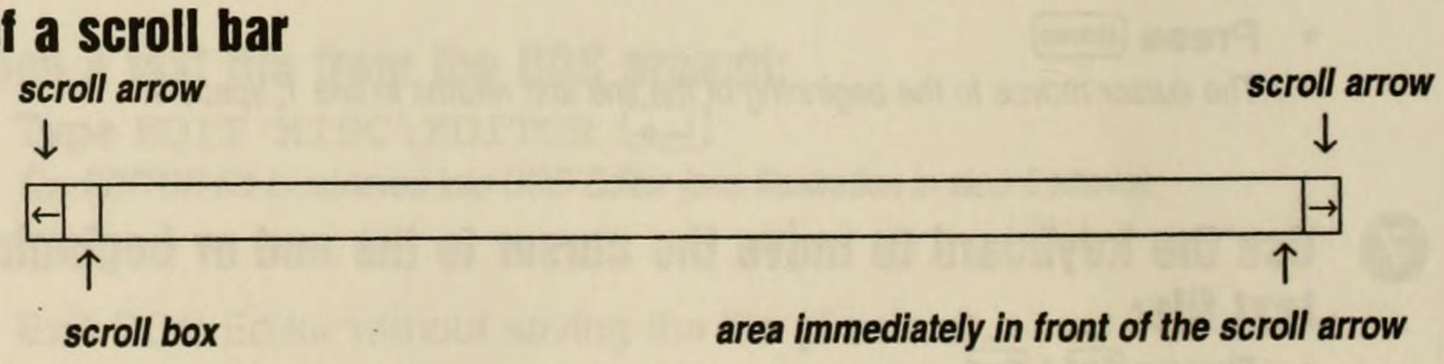
- **Press** [Ctrl]+[PgDn] once more.
  *The window scrolls one right one screen and displays the text below. The **space counter** displays 235 and you can see the end of the line.*

```
ounting the space number that the cursor is on.  It is now on about space 256
```

- **Press** [Ctrl]+[PgUp] three times.
  The window scrolls, one screen at a time, to the beginning of the window (and the beginning of the line).

10 **Use the mouse to move the cursor around on the screen:**
(the cursor will move to wherever you move the *mouse pointer* and click)
- **Click** the first character in the text file (the `D` in `DOS`).
  The cursor moves to the beginning of the file.
- **Click** the beginning of the second paragraph (the `D` in `DOS`).
  The cursor moves to the beginning of the second paragraph.
- **Click** the end of the second line in the second paragraph.
- **Click** on the `O` in `OK` in the middle of the last line in the second paragraph.

Parts of a scroll bar



Exercise 60 continued...

⓫ Use the mouse to scroll the window one screen at a time:

- **Click** immediately in front of the arrow on the *right* end of the bottom scroll box.
  The window scrolls right one screen.
- **Click** immediately in front of the arrow on the right end of the bottom scroll box again.
  The window scrolls right one screen again.
- **Click** immediately in front of the arrow on the right end of the bottom scroll box one more time.
  The window scrolls until it displays the right end of the editing window.
- **Click** *three times* immediately in front of the arrow on the *left* end of the bottom scroll box.
  The window scrolls to display the beginning of the editing window.

⓬ Use the mouse to scroll the editing window by dragging the scroll box:

- **Drag** the *scroll box* to the *right* end of the *scroll bar*.
  The window scrolls until the right end of it is displayed, and the scroll box moves to the right end of the scroll bar.
- **Drag** the *scroll box* to about the middle of the *scroll bar*.
  The window scrolls until about the middle of it is displayed.
- **Drag** the *scroll box* to the *left* end of the *scroll bar*.
  The window scrolls until the beginning of it is displayed, the cursor moves to the beginning of the line, and the scroll box moves to the left end of the scroll bar.

⓭ Use the mouse to scroll the editing window one character at a time:

- **Click** the arrow on the *right* end of the bottom scroll box several times.
  The screen scrolls one character at a time.
- **Click** the arrow on the *left* end of the bottom scroll box until the window scrolls to display the beginning of it.

⓮

- **Choose** File, Exit.
  A dialog box appears to warn you that the file is not saved, and asks if you want to "Save it now?".
- **Choose** < No >.
  The DOS prompt appears.

```
A:\>
```

⓯

- **Go on** to Exercise 61
  or **take** the disk out of drive A: and turn the computer off.

EXERCISE 61

Select text

To use the keyboard or mouse to highlight text in the editing window.

OBJECTIVES:

- identify what selected text looks like
- identify how to use the mouse and keyboard to select text
- identify actions you can perform on selected text
- use the keyboard to select text:
  - a character at a time
  - a word at a time
  - a line at a time
- use the mouse to select:
  - a small section of text
  - lines of text

– Terms and Notes –

highlight
To select an item or text, causing it to be displayed in a different color or in reverse video (the foreground and background colors are opposite the normal screen colors).

STEPS to

Select text a character at a time

1 **Move** the cursor to the beginning or end of the text you want to select.
2 **Hold down** Shift while you press → or ← until the text is highlighted.

Select text a word at a time

1 **Move** the cursor to the beginning or end of the word (or words) you want to select.
2 **Hold down** Shift while you press Ctrl + → or Ctrl + ← until the text you want to select is highlighted.

Select text a line at a time

1 **Move** the cursor to the top or bottom line of the group of lines you want to select.
2 **Hold down** Shift while you press ↓ or ↑ until the lines you want to select are highlighted.

Cancel selected text

- **Press** any cursor movement key.

Selecting text

When text is selected, it becomes **highlighted** (or displayed in reverse video). For example:

unselected text `Now is the time.`
selected text `Now is the time.`

You can use the mouse or the keyboard to select text:

mouse — position the cursor at the beginning of the text you want to select, and then *drag* the cursor up, down, right, or left to highlight the text you want to highlight
keyboard — use Shift along with the *cursor movement* key combinations

Once *selected*, you can cut, copy, delete, or print the *selected* text.

1
- If necessary, **access** the DUPLICATE Learning Disk on drive A: and **change** to this common DOS prompt: `A:\>`

2
- **Type** `EDIT MISC\EDITOR` ↵

The EDITOR text file is retrieved with the cursor on line 1, space 1.

```
DOS Editor is a text editor that works with lines instead of paragraphs (it
does not wrap lines into a paragraph as a word processor does).  A line can
be up to 256 characters long in DOS Editor.  Lines must be ended with a
"carriage return code," which is created when you press Enter.

DOS Editor provides menus on a menu bar from which you "choose" commands.
Commands that are followed by an ellipsis (...) open a dialog box that
asks for additional information.  When you are satisfied with the information
in the dialog box, "choose" < OK > to complete the original command.
```

3 **Use the keyboard to select text a character at a time:**

With the cursor at the beginning of the text file:

- **Hold down** Shift while you **press** → 10 times, then **release** Shift

*DOS Editor is **selected** (highlighted).*

`DOS Editor is a text editor that works with lines...`

- **Press** → to cancel the highlighting.

The highlighting disappears, and the cursor remains at its new location.

*NOTE: Any cursor movement key, by itself, will cancel the highlighting, but be careful, since pressing a letter will **delete** the selected text.*

4 **Use the keyboard to select text a word at a time:**

- **Hold down** Shift while you **press** Ctrl + → 5 times, then **release** Shift

*Five words are **selected** (highlighted).*

`DOS Editor is a text editor that works with lines..`

Exercise 61 continued...

❺ Use the keyboard to select text a line at a time:

- **Hold down** Shift while you **press** ↓ once, then **release** Shift
  *Both lines that the cursor was on are **selected**.*
  NOTE: If your cursor is not at the beginning of a line when you press ↓ or ↑, the entire lines that the cursor touches will be selected.
- **Press** Ctrl + Home
  The cursor moves to the beginning of the first line.
- **Hold down** Shift while you **press** ↓ once, then **release** Shift
  *Only the first line is **selected**.*
- **Press** Esc to *cancel* the *selected* text.

❻ Use the mouse to select a small section of text:

(select the word "does" at the beginning of the second line)

- **Move** the *mouse pointer* on the `d` in `does` at the beginning of the second line.
- **Drag** the cursor until the *mouse pointer* is on the space after `does` (if the mouse pointer wanders up or down too far, two entire lines (or more) will be highlighted). Do not release the mouse button, but simply adjust the mouse up or down and the section of the text on one line will be highlighted again.
- **Release** the mouse button when the word is highlighted.

NOTE: Selecting small sections of text may take a little practice if you are new to using the mouse.

- **Click** anywhere in the editing window to *cancel* the highlighting.

❼ Use the mouse to select lines of text:

(select lines two, three, and four of the first paragraph)

- **Move** the *mouse pointer* anywhere on the second line.
- **Drag** the *mouse pointer* down to the fourth line.
  Lines two, three, and four of the first paragraph should be highlighted.
- **Click** anywhere in the editing window to *cancel* the highlighting.

❽ • **Exit** DOS Editor; **select** < `No` > if asked if you want to save.

❾ • **Go on** to Exercise 62
or **take** the disk out of drive A: and turn the computer off.

STEPS to

Select a small section of text

1 **Move** the *mouse pointer* to the beginning or end of the text you want to select.
2 **Drag** the *mouse pointer* up, down, right, or left to highlight the text you want to select.

Select lines of text

1 **Move** the *mouse pointer* to the beginning or end of the lines of text you want to select.
2 **Drag** the *mouse pointer* up or down to highlight the lines you want to select.

Cancel selected text

- **Click** anywhere in the editing window.

EXERCISE 62

Edit text

To insert, replace, cut, copy, paste, and delete text.

OBJECTIVES:

- delete text
- cut and paste text
- copy and paste text
- insert text
- replace text
- print text

– Terms and Notes –

cut text
To transfer *selected* text from a text file into a buffer, deleting the original text.

copy text
To transfer *selected* text from a text file into a buffer, leaving the original text intact.

paste text
To copy text from the *buffer* into a text file. *Paste* leaves the original text in the *buffer* so it can be pasted again and again (until you cut or copy other text).

delete text
To remove text from a text file without placing it in the *buffer*. You cannot *paste* text that has been deleted.

insert text
To use the *insert cursor* so that the text you type at the cursor pushes the existing text to the right and down.

replace text (also overstrike or overwrite)
To use the *replace cursor* so that the text you type at the cursor overwrites the existing text.

buffer
A temporary storage area where text that is *cut* or *copied* is stored, ready to be *pasted* back into a text file. The buffer stores only the last piece of information that is *cut* or *copied*. *Pasting* information from the buffer does not remove it from the buffer.

insert cursor
A blinking *line* that tells you where the next character you type will be displayed.

replace cursor
A blinking *rectangle* that tells you where the next character you type will be displayed.

block
A section of *selected* text.

❶
- If necessary, **access** the DUPLICATE Learning Disk on drive A: and **change** to this common DOS prompt: `A:\>`

❷
- **Start** DOS Editor and clear the Welcome message.
- **Type** the following, pressing Enter only where indicated:

```
There are four ways to delete text: ↵
1. Press DEL to delete the character at the
cursor. ↵
2. Press BACKSPACE to delete the character to the
left of the cursor. ↵
3. Press CTRL + T to delete the word at the
cursor. ↵
4. Select text and press DEL to delete a block of
text. ↵
```

❸ **Delete text:**

When you **delete** text, it is not moved in the *buffer*, so it cannot be pasted back into your text file.

- **Move** the cursor to the *beginning* of the line that begins with 1.
- **Press** Del until the entire line is deleted.

- **Move** the cursor to the *end* of the line which begins with 2.
- **Press** BkSp until the entire line is deleted.

- **Move** the cursor to the `P` in `Press` (in the line which begins with 3).
- **Press** Ctrl + T (to delete the word, `Press`).
  *The word `Press` is deleted, but **not** the space after the word.*
- **Press** Del once (to delete the extra space before `CTRL`) .
- **Press** Home (to move to the beginning of the line).
- **Press** Del until the rest of the sentence is deleted.

- **Select** (highlight) the entire sentence that begins with 4.
  (One way to *select* the line is to **move** the cursor to the beginning of the line, **hold down** Shift while you **press** End, and then **release** Shift).
- **Press** Del

❹
- **Move** the cursor to the beginning of line two.
  The line/space counter displays 00002:001.
- **Type** `This is how you cut and paste text.`
  (Do not press Enter)

❺ **Cut and paste text (also called move text):**

When you **cut** text, it is moved a to *buffer* so it is available to be pasted back into the text file when you want it.

- **Press** Shift + Home (to *select* the line you just typed).
- **Press** Shift + Del (to cut the *selected* text).
- **Press** Shift + Ins (to paste the *selected* text).
- **Press** ↓ (to move to line 3).
- **Press** Shift + Ins (to paste the *selected* text again).

❻
- **Move** the cursor to the beginning of line four (line/space counter displays 00004:001).
- **Type** `This is how you copy and paste marvelous text.`

Exercise 62 continued...

❼ Copy and paste text:

When you **copy** text, it is transferred to the *buffer* so it is available to be *pasted* back into the text file when you want it.

- **Select** `marvelous` *and* the space after it.
- **Press** Ctrl + Ins (to copy the *selected* text).
  *"marvelous" remains highlighted on the screen **and** it was copied to the buffer.*
- **Move** the cursor on the `t` in `text` at the end of line two.
- **Press** Shift + Ins (to copy marvelous).
- **Move** the cursor on the `t` in `text` at the end of line one.
- **Press** Shift + Ins (to copy marvelous again).
  Your text should look like this.

```
There are four ways to delete marvelous text:
This is how you cut and paste marvelous text.
This is how you cut and paste text.
This is how you copy and paste marvelous text.
```

❽ Insert text:

The cursor should be a blinking **line**.

- **Move** the cursor on the `w` in `ways` (on line one).
- **Type** `precise` and **press** Space
- **Move** the cursor on the `c` in `cut` (on line two).
- **Type** `carefully` and **press** Space
- **Move** the cursor on the `c` in `copy` (on line four).
- **Type** `cautiously` and **press** Space
  Your text should look like this.

```
There are four precise ways to delete marvelous text:
This is how you carefully cut and paste marvelous text.
This is how you cut and paste text.
This is how you cautiously copy and paste marvelous text.
```

❾ Replace text:

- **Press** Ins
  *The cursor changes to a blinking rectangle that is called a **replace cursor**.*
- **Move** the cursor to the `m` in the *third* `marvelous` (on line four).
- **Type** `wonderful`
  As you typed, the new letters replaced the original letters.
- **Move** the cursor to the `m` in the *second* `marvelous` (on line two).
- **Type** `fantastic`
- **Move** the cursor to the `p` in `precise` (on line one).
- **Type** `general`
- **Press** Ins
  *The cursor changes back to a blinking line that is called an **insert cursor**.*

❿ Print your text file:

- **Choose** File, Print.
- **Choose** < OK >.
- **Force** the printer to eject the paper, if necessary. Remember to press "on line" so the printer will be ready to print again.

```
There are four general ways to delete marvelous text:
This is how you carefully cut and paste fantastic text.
This is how you cut and paste text.
This is how you cautiously copy and paste wonderful text.
```

⓫ • **Exit** DOS Editor; **select** < No > when asked if you want to save.

⓬ • **Go on** to Exercise 63
or **take** the disk out of drive A: and turn the computer off.

Exercise 62 (continued)
Edit text

text editing *menu commands*

to	choose
cut text	Edit, Cut
copy text	Edit, Copy
paste text	Edit, Paste
delete selected text	Edit, Clear

text editing *shortcut keys*

to	press
cut text	Shift + Del
copy text	Ctrl + Ins
paste text	Shift + Ins
delete selected text	Del
delete a word	Ctrl + T
delete character *at* cursor	Del
delete character *left* of cursor	BkSp
toggle replace/insert cursor	Ins

STEPS to

Delete text

Delete a character:

1 **Move** cursor to beginning or end of text to delete.
2 **Press** BkSp to delete the character to the *left* of the cursor.
or **press** Del to delete the character *at* the cursor.

Delete a word:

1 **Move** the cursor to the beginning of the word to delete.
2 **Press** Ctrl + T

Delete a block of text:

1 **Select** the text you want to delete.
2 **Press** Del

Cut text

1 **Select** the text you want to cut.
2 **Press** Shift + Del

Copy text

1 **Select** the text you want to copy.
2 **Press** Ctrl + Ins

Paste text

1 **Move** the cursor to the place you want to paste the text that is in the buffer.
2 **Press** Shift + Ins

Insert text

1 **Move** the cursor to the place you want to insert text.
2 **Press** Ins until the cursor is a blinking line.
3 **Type** the text you want to insert.

Replace text

1 **Move** the cursor to the place you want to replace text.
2 **Press** Ins until the cursor is a blinking rectangle.
3 **Type** the text to *replace* the existing text.
4 **Press** Ins to return to an *insert cursor.*

EXERCISE 63

Find text

To search for specific text in a text file.

OBJECTIVES:

- search for text
- repeat a search
- search for *case-sensitive* text
- search for *whole word* text

- Terms and Notes -

case sensitive
The Search mode in which Search looks for an *exact* match of the uppercase and lowercase text that you type in the *Find What text box.*

whole word
The Search mode in which Search looks for text that has spaces (or punctuation or certain symbols) on either side of it.

Using Search

You use the *Search* feature to find a specific word, phrase, or combination of characters and spaces in a text file. *Search* looks for text in both directions, or more precisely, it rotates its search; it looks forward from the *cursor* first, and then goes to the top of the document and searches forward up to the *cursor.*

Search is especially useful when you want to find specific text in a long text file.

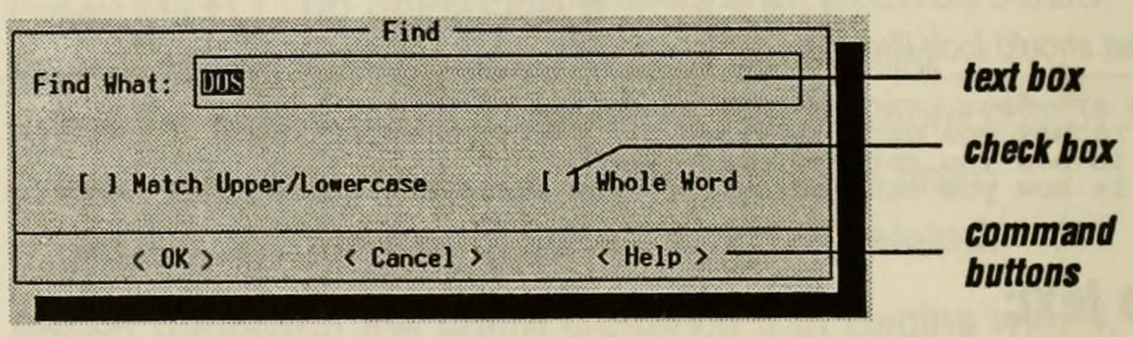
❶ • If necessary, **access** the DUPLICATE Learning Disk on drive A: and **change** to this common DOS prompt: `A:\>`

❷ • **Start** DOS Editor and **open** `EDITOR` in one command. Remember to type the path along with the filename (review, page 148, step 12).

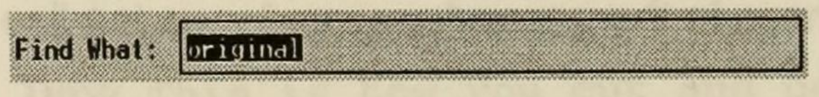
```
DOS Editor is a text editor that works with lines instead of paragraphs (it
does not wrap lines into a paragraph as a word processor does).  A line can
be up to 256 characters long in DOS Editor.  Lines must be ended with a
"carriage return code," which is created when you press Enter.

DOS Editor provides menus on a menu bar from which you "choose" commands.
Commands that are followed by an ellipsis (...) open a dialog box that
asks for additional information.  When you are satisfied with the information
in the dialog box, "choose" < OK > to complete the original command.
```

❸ Search for text:

- **Choose** Search, **F**ind.
  The Find dialog box opens.



- **Type** `original`
- **Press** ↵
  The cursor jumps to "original", which is then highlighted.
- **Choose** Search, **F**ind.
  The Find dialog box opens and "original" is highlighted in the text box.



NOTE: The Find dialog box remembers your last request (in case you want to find another instance of that word). The first letter you type deletes the highlighted word.

- **Type** `instead` ↵
  The cursor jumps to "instead", which is then highlighted.

❹ Repeat a search:

- **Choose** Search, **F**ind.
  The Find dialog box opens and "instead" is highlighted in the text box.
- **Type** `command` ↵
  The cursor jumps to the first "command" it finds (at the end of the first line in the second paragraph).

  NOTE: It does not matter that there is an "s" at the end of the word because the Whole Word check box is not selected.

Exercise 63 continued...

Step 4 (continued)

- **Press** F3 (the shortcut key for *Repeat Last Find*).
  The cursor jumps to the second "command" it finds (at the beginning of the second line in the second paragraph).
  NOTE: It does not matter that the first letter is a capital since the Match Upper/Lowercase check box is not selected.
- **Press** F3 again.
  The cursor jumps to the third "command" it finds (the last word in the text file).
- **Press** F3 five or six more times.
  The cursor rotates through the three instances of "command" in the text file.

5 Search for text that is case sensitive:

The search feature is not *case sensitive* by default, that is, you can use either uppercase or lowercase letters in the *Find What text box* to search for either uppercase or lowercase in the *text file*. But if you select the Match Upper/Lowercase *check box*, then Search becomes *case sensitive*.

- **Choose** Search, **F**ind.
  The Find dialog box opens.
- **Select** the Match Upper/Lowercase *check box* (review, page 141).
- **Press** ↵
  The search command will find the next instance of "command."
- **Press** F3 four or five times.
  The search command highlights only two instances of "command."
  *NOTE: Search will **not** find the instance of "Command" because it begins with an uppercase letter and it is searching for "command" with a lowercase "c."*

6 Search for text that is a whole word:

A "whole word" search recognizes a match only when the target text is surrounded by spaces, punctuation, or certain other characters (such as quotation marks).

- **Choose** Search, **F**ind.
  The Find dialog box opens.
- **Deselect** the Match Upper/Lowercase *check box* (review, page 141).
- **Select** the Whole Word *check box* (review, page 141).
- **Select** the Find What *text box*.
- **Type** `is` ↵
  The search command finds an instance of "is."
- **Press** F3 three times.
  The search command rotates between two instances of "is."
- **Choose** Search, **F**ind.
  The Find dialog box opens.
- **Deselect** the Whole Word *check box* (review, page 141).
- **Press** ↵
  The search command finds an instance of "is," but it may not be a "whole word."
- **Press** F3 about eight times.
  *The search command rotates between four instances of "is" that may or may not be a **whole word**; one instance is within "ellipsis" and another is within "satisfied."*

7

- **Exit** DOS Editor; **select** < No > if asked if you want to save.

8

- **Go on** to Exercise 64
  or **take** the disk out of drive A: and turn the computer off.

Exercise 63 (continued)
Find text

STEPS to

Search for text

1 **Choose** Search, **F**ind.
2 **Type** the text you want to search for.
SELECT A WAY TO SEARCH:
a) Search without regard to whether the text is *Upper/Lowercase* or *whole word*:
- **Deselect** both text boxes.

b) Search for case-sensitive text only:
- **Select** the *Upper/Lowercase check box*; **deselect** the *Whole Word check box*.

c) Search for whole word text only:
- **Select** the *Whole Word check box*; **deselect** the *Upper/Lowercase check box*.

d) Search for both case-sensitive and whole word text:
- **Select** both *check boxes*.

NOTE: A check box is selected when there is an X in it, and deselected when there is no X in it.
3 **Press** ↵

Repeat a search

- **Press** F3

EXERCISE 64

Practice

LESSON SIX
DOS Editor

OBJECTIVE:

- review the following tasks from the exercises in Lesson Six:

  Start DOS Editor
  Use the menu bar
  Use dialog boxes
  Create a text file
  Print a text file
  Save a text file
  Open a text file
  Move the cursor
  Select text
  Edit text
  Find text

The COMMANDS to perform the step below are listed in Appendix I. Try to complete the Practice Exercise without looking in the Appendix for help.

1. If necessary, **access** the DUPLICATE Learning Disk on drive A: and **change** to this common DOS prompt: `A:\>`

2. **Start** DOS Editor and clear the Welcome message.

3. **Exit** DOS Editor.

4. **Start** DOS Editor and **open** the EDITOR file (in the MISC directory) in one command.

5. **Select** the Options menu.
   The Options menu drops down.

6. **Cancel** the Options menu and menu bar.
   The menu and menu bar are canceled.

7. **Choose** File, Print... .
   The Print dialog box opens.

8. **Cancel** the Print dialog box.

9. **Clear** the screen, that is, start a *New* (clear) editing window. If asked if you want to save, choose < No >.

10. **Type** the following text, pressing [↵] where indicated:

```
This practice exercise repeats most of the procedures
you did in Lesson Six [↵] and helps you recall the
commands you used.  While this lesson introduces you
[↵] to DOS Editor, you must work with a program over a
period of time before you [↵] become comfortable with
it.  Remember that you can always look up DOS [↵]
commands and procedures in this book if you need to
refresh your memory about [↵] how to do a task.
```

11. **Save** the text file in the MISC directory; name it LSNSIX.

12. **Print** the text file.

```
This practice exercise repeats most of the procedures you did in Lesson Six
and helps you recall the commands you used.  While this lesson introduces you
to DOS Editor, you must work with a program over a period of time before you
become comfortable with it.  Remember that you can always look up DOS
commands and procedures in this book if you need to refresh your memory about
how to do a task.
```

Exercise 64 continued...

13. **Clear** the screen, that is, start a *New* (clear) editing window. If asked if you want to save, choose < No >.

14. **Open** the LSNSIX text file (in the MISC directory).
The LSNSIX text file is opened. It looks the same as the illustration in step 12.

15. **Move** the cursor to the beginning of the *text file* (use the keyboard).

16. **Move** the cursor to the end of the first line (use the keyboard).

17. **Move** the cursor to the beginning of the first line (use the keyboard).

18. **Move** the cursor to the beginning of the *next* word (use the keyboard).

19. **Move** the cursor to the beginning of the *previous* word (use the keyboard).

20. **Move** the cursor to the end of the *text file* (use the keyboard).

21. **Select** the first 15 characters in the text file (use the keyboard).

22. **Select** the second word, `practice` (use the keyboard).

23. **Select** the third line (use the keyboard).

24. **Select** the second word, `practice` (use the mouse, if available).

25. **Select** the third line (use the mouse, if available).

26. **Find** the text, `you used`
The cursor jumps to "you used", which is then highlighted.

27. **Delete** the text, `you used` , *and* the space before it.

28. **Move** to the beginning of the text file.

29. **Find** the text, `procedures`.
The first instance of "procedures" (on the first line) is highlighted.

Exercise 64 continued...

30 **Use** the *keyboard shortcut* to **find** the next instance of `procedures`.
The second instance of "procedures" (on the fifth line) is highlighted.

31 **Delete** the second `procedures`.

32 **Copy** the word `task` and **paste** it where you just deleted the word `procedures`.

33 **Insert** an `s` after the word, `task`, that you just pasted.

34 **Change** the *insert cursor* to the *replace cursor*.

35 **Using** the *replace cursor*, replace `procedures` on the first line with `strategies`.

36 **Change** the *replace cursor* to the *insert cursor*.

37 **Insert** the word `handy` in front of the word `book` .

38 **Print** the text file; **force** the printer to eject the paper.

```
This practice exercise repeats most of the strategies you did in Lesson Six
and helps you recall the commands.  While this lesson introduces you
to DOS Editor, you must work with a program over a period of time before you
become comfortable with it.  Remember that you can always look up DOS
commands and tasks in this handy book if you need to refresh your memory about
how to do a task.
```

39 **Exit** DOS Editor; **select** < `No` > when asked if you want to save.

40 **Go on** to Worksheet 21.
If desired, **take** the disk out of drive A: and turn the computer off.

WORKSHEET 21

TOPIC 13 and EXERCISES 53 and 54

NAME _____

DIRECTIONS: Use the following terms to fill in the blanks below.

menu	cursor	scroll bar	batch files	inactive command
select	ASCII	DOS Editor	mouse pointer	Start DOS Editor
cancel	menu bar	status bar	editing window	line/space counter
choose	command	text editor	Use the menu bar	unformatted text files

1. The horizontal bar across the top of the DOS Editor screen that displays menus. 1. _____

2. A *bar* that may appear at the right and/or bottom edge of a window (or right edge of a list box) that allows you to scroll the window (or list box) when its contents are not fully visible. 2. _____

3. The horizontal bar across the bottom of the DOS Editor screen that displays common commands that are available in the current situation. 3. _____

4. A text-editing program that is used to create simple documents and batch files. 4. _____

5. The work area in DOS Editor. 5. _____

6. Files that contain a series of DOS commands (in a text-only format) that, when run, will be executed one after the other. 6. _____

7. Files that contain only ASCII text characters (letters, numbers, and symbols) and a few codes such as a *carriage return*. 7. _____

8. A file format for unformatted, text-only information. 8. _____

9. Instructions to a program that cause an action to be carried out. 9. _____

10. To mark an item so that a subsequent action will activate the item. 10. _____

11. A blinking line (or rectangle if you are in typeover mode) that tells you where the next character you type will be displayed. 11. _____

12. To pick a command that starts an action. 12. _____

13. To escape, or back out of, a menu or dialog box without completing a command. 13. _____

14. A small rectangle (▮) in DOS Editor that moves with the mouse as you slide the mouse over a flat surface. 14. _____

15. A command that cannot be used in the *current* situation. 15. _____

16. A program that operates in *ASCII file format* and that you use to create and edit *unformatted text files*. 16. _____

17. A gauge that tracks the cursor in DOS Editor. 17. _____

18. To select and cancel a menu and to choose a command from a menu. 18. _____

19. To issue the command that begins the DOS Editor program, EDIT. 19. _____

20. A list of commands from which you may *choose*. 20. _____

(This page may be copied.)

WORKSHEET 22

EXERCISES 55, 56, 57, 58, 59, and 60

NAME _____

DIRECTIONS: Use the following terms to fill in the blanks below.

deselect	scroll box	scroll arrow	Move the cursor	Use dialog boxes
list box	dialog box	option buttons	Open a text file	Print a text file
text box	check boxes	command button	Save a text file	Create a text file

1. Squares next to items in a dialog box from which you may select as many as you want. 1. _____

2. A box that appears when a *menu command* with an ellipsis (...) is chosen. 2. _____

3. A small box that holds an icon or a word that will carry out a command when chosen. 3. _____

4. To *unmark* an item so that a future action will *not* activate the item. 4. _____

5. Circles next to items in a dialog box from which you may select *only one of a related group*. 5. _____

6. To use various methods to specify information in dialog boxes. 6. _____

7. The arrow at each end of a scroll bar, used to *scroll* through the contents of a window. 7. _____

8. A box in a dialog box that provides space to type the information needed to carry out a command. 8. _____

9. A box in a dialog box that provides a list of options from which one item may be selected. 9. _____

10. To type text in DOS Editor. 10. _____

11. To store the text in DOS Editor on a disk. 11. _____

12. To position the cursor at various locations in the editing window using the keyboard or the mouse. 12. _____

13. To print a copy of the text in the DOS Editor editing window. 13. _____

14. To retrieve a text file into DOS Editor. 14. _____

15. A small box in a scroll bar that shows the position of the information *displayed* in a window in relation to the *entire contents* of the window. 15. _____

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WORKSHEET 23

EXERCISES 61, 62, 63, and 64

NAME _____

DIRECTIONS: Use the following terms to fill in the blanks below.

block	Edit text	copy text	delete text	replace text	case sensitive
buffer	cut text	paste text	Select text	insert cursor	
highlight	Find text	whole word	insert text	replace cursor	

1. To transfer *selected* text from a text file into a buffer, deleting the original text. 1. _____

2. The Search mode in which Search looks for an *exact* match of the uppercase and lowercase text that you type in the *Find What text box.* 2. _____

3. To remove text from a text file without placing it in the *buffer.* 3. _____

4. To copy text from the *buffer* into a text file. 4. _____

5. To select an item or text, causing it to be displayed in a different color or in reverse video (the foreground and background colors are opposite the normal screen colors). 5. _____

6. To use the keyboard or mouse to highlight text in the editing window. 6. _____

7. To use the *insert cursor* so that the text you type at the cursor pushes the existing text to the right and down. 7. _____

8. To insert, replace, cut, copy, paste, and delete text. 8. _____

9. To search for specific text in a text file. 9. _____

10. A section of *selected* text. 10. _____

11. The Search mode in which Search looks for text that has spaces (or punctuation or certain symbols) on either side of it. 11. _____

12. To transfer *selected* text from a text file into a buffer, leaving the original text intact. 12. _____

13. A blinking *line* that tells you where the next character you type will be displayed. 13. _____

14. A temporary storage area where text that is *cut* or *copied* is stored, ready to be *pasted* back into a text file. 14. _____

15. To use the *replace cursor* so that the text you type at the cursor overwrites the existing text. 15. _____

16. A blinking *rectangle* that tells you where the next character you type will be displayed. 16. _____

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WORKSHEET 24

NAME _____

LESSON SIX, Questions and Commands

1. What kind of program is DOS Editor? 1. _____
2. What kind of files does DOS Editor create? 2. _____
3. What kind of files contains series of DOS commands? 3. _____
4. What is the horizontal bar across the top of the DOS Editor screen? 4. _____
5. What is the *work area* in DOS Editor? 5. _____
6. What is the gauge that tracks the cursor in DOS Editor? 6. _____
7. What is the list of commands from which you may choose? 7. _____
8. What do you call it when you *mark* an item so that a subsequent action will activate it? 8. _____
9. What do you call it when you *pick* a command that starts an action? 9. _____
10. What key activates and cancels the menu bar? 10. _____
11. What is the box that appears when you *choose* a command with an ellipsis (...)? 11. _____
12. What do you call a *box* within a dialog box that provides space to *type* information that is needed to complete a command? 12. _____
13. What are *circles* next to items from which you may select only one? 13. _____
14. What is a word inside *angle brackets* (< >)? 14. _____
15. What do you call squares (brackets, [ ]) next to items in a dialog box from which you may select as many as you want? 15. _____
16. What is a box in a dialog box that provides a list of options from which one item may be selected? 16. _____
17. What is a temporary storage area that stores text that is *cut* or *copied*? 17. _____
18. Can text that is *cut* be pasted back into a document? 18. _____
19. Can text that is *deleted* be pasted back into a document? 19. _____
20. What key moves the cursor to the beginning of text on a line? 20. _____
21. What key moves the cursor to the end of text on a line? 21. _____

WHAT ARE THE COMMANDS TO:

22. Start DOS Editor with a new (clear) screen. 22. _____
23. Start DOS Editor and edit a file named GAMES.BAT. 23. _____

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Lesson Seven
Automating DOS

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TOPIC 14

Automating DOS

To use batch files to execute groups of commands — especially to use AUTOEXEC.BAT.

OBJECTIVES:

- identify how you create *batch files*
- identify what *batch files* are
- identify the *filename extension* that all *batch files* must use
- identify frequently used *batch file* commands
- identify .DAT files
- identify the AUTOEXEC.BAT *batch file* and what it does
- identify CONFIG.SYS and what it does
- identify location of AUTOEXEC.BAT and CONFIG.SYS (root directory of boot disk)

- Terms and Notes -

batch file
A *text file* that is made up of a group of *DOS commands* that are executed one after the other when you *run* the file.

.DAT file
A *text file* that commonly contains information that you display by using a command in a *batch file*.

AUTOEXEC.BAT
An important batch file that DOS looks for and executes when you turn the computer on. AUTOEXEC.BAT contains commands that set up your work environment the way you want it.

CONFIG.SYS
An important *batch-like* file that you use to tell DOS how to manage your computer system's hardware and memory. CONFIG.SYS is executed when the computer system starts.

NOTE: Only simple batch files are covered in this book. Batch files are capable of executing very complex tasks using programming commands such as FOR, IF, GOTO, CHOICE, and CALL.

Batch files

DOS can carry out your commands two ways:
one at a time — as you type each command at the DOS prompt, or
in a batch — when you execute (run) a **batch file**.

You *group* commands together in a *batch file* by typing them in a *text file*, as described in Lesson Seven. The batch file's filename must use a .BAT *filename extension*, and the first part of the filename should describe the task the *batch file* does.

A *batch file* is a mini program. When you *run* a *batch file*, DOS performs the *batch file* task one command at a time. Examine these three simple commands:

CD\PROGRAMS — makes the PROGRAMS directory *current*
WP — *runs* the WP.EXE program
CD\ — changes to the *root* directory

Together, the three commands above "start the word processing program." A good name for a *batch file* with these commands might be WORD.BAT.

Batch file commands

You use certain DOS commands often in batch files; in fact, some are designed specifically for batch files. Below is a list of commands that are frequently used in *batch files*:

CLS	clear screen
ECHO	turn *command display* feature on and off, and display messages
PATH	set a *search path* in the computer's memory
PROMPT	change the DOS prompt
PAUSE	stop the execution of a batch file until you press a key
REM	remark (DOS does not execute lines that begin with REM)

Using data files (.DAT) in batch files

Batch files often use the TYPE command to *display* information that is stored in *data files*. It is common to use a .DAT *filename extension* to identify these *data files* that *batch files* use.

AUTOEXEC.BAT

AUTOEXEC.BAT is a special *batch file* that DOS looks for every time the computer starts. Since there is no path set when the computer is first turned on, AUTOEXEC.BAT must be located in the *root* directory of the *boot* disk for DOS to be able to find it.

AUTOEXEC.BAT has commands that set up your work environment the way you want it. AUTOEXEC.BAT usually contains commands that you need to do every time you start the computer, such as set the PROMPT and PATH commands. Many people put a command to start a *menu* program or the Windows program in AUTOEXEC.BAT; they do not see the DOS prompt when they boot the computer. Some people want AUTOEXEC.BAT to start a virus-scanning program.

CONFIG.SYS

Another special file that DOS looks for when the computer starts (even before it looks for AUTOEXEC.BAT) is CONFIG.SYS. CONFIG.SYS is a *batch-like* file that uses a .SYS extension instead of a .BAT extension. CONFIG.SYS is a very important file that you use to tell DOS how to manage your computer system's hardware and memory. Like AUTOEXEC.BAT, CONFIG.SYS must be located in the *root* directory of the *boot* disk.

❶ • If necessary, **access** the DUPLICATE Learning Disk on drive A: and **change** to this common DOS prompt: `A:\>`

❷ **Open DOS Editor and name a new batch file in one command:**

• **Type** `EDIT WORD.BAT` ↵

DOS Editor opens a new (clear) screen with the title WORD.BAT.

NOTE: If you open DOS Editor using a new filename (one that is not in the current directory on your disk), DOS Editor will open with a new (clear) editing window. However, if you open DOS Editor using a filename of a text file on your disk, DOS Editor will open with the contents of that file in its editing window.

❸ **Create a simple batch file:**

• **Type** `CD\PROGRAMS` ↵
• **Type** `WP` ↵
• **Type** `CD\` ↵

❹ **Save the batch file and exit DOS Editor using <u>two</u> commands:**

• **Press** Alt + F (**F**ile), S (**S**ave).

DOS Editor saves the file and returns to the editing window.

• **Press** Alt + F (**F**ile), X (E**x**it).

DOS Editor exits to a DOS prompt.

```
A:\>
```

NOTE: Exercise 69, step 3 will instruct you to use a shortcut method to "exit and save" a batch file using <u>one</u> command.

❺ **Run the new batch file:**

• **Type** `WORD` ↵

DOS runs the batch file, which in turn tells DOS to run the WP.EXE program.

```
                * * * Word Processing Program * * *

If this was a real word processing program

you would use it to:

     * Type in text to create documents.
     * Edit (revise) what you have typed.
     * Format text (such as underline, bold, and center).
     * Save your documents to disk files.
     * Print your documents.

Press <Enter> to exit this program ?
```

• **Press** ↵

```
A:\>
```

❻ • **List** the contents of the *root* directory.

Your batch file is listed in the first available spot.

```
 Directory of A:\

GAMES          <DIR>        05-02-93   7:46p
FOOD           <DIR>        05-02-93   7:46p
PROGRAMS       <DIR>        05-22-93   8:41p
TEMP           <DIR>        05-22-93   9:45p
WORD      BAT          24  10-15-93   4:54p
MISC           <DIR>        05-22-93   9:44p
        6 file(s)              24 bytes
                         XXXXXXX bytes free
```

❼ • **Go on** to Exercise 66
or **take** the disk out of drive A: and turn the computer off.

EXERCISE 65

Create a simple batch file

Use DOS Editor to type a three-line batch file.

OBJECTIVES:

- open DOS Editor and name a new batch file in one command
- create a simple batch file
- exit DOS Editor and save the batch file using two commands
- run the new batch file

STEPS to

Create a batch file in the current directory

1 **Type** `EDIT`
2 **Press** Space
3 **Type** the first part of the batch file name.
4 **Type** `.BAT`
5 **Press** ↵
6 **Type** the commands, using DOS Editor, that make up the batch file.
7 **Press** Alt + F (File), S (Save).
8 **Press** Alt + F (File), X (Exit).

Run a batch file

• **Type** the first part of the batch file's filename. (You can add the .BAT extension if you want.)

EXERCISE 66

PATH

Sets a search path for executable files.

OBJECTIVES:

- display the current search path
- clear the search path
- run a program that is not in the current directory
- set a search path in the computer's memory
- run a program that is in the search path

– Terms and Notes –

NOTE: This exercise will remove any *path* that may have been set in your computer's memory when the computer was turned on. When you turn the computer off and back on again, the original path will return. You can also return to the original *path* statement if you change to the *root* directory on drive C: and type AUTOEXEC ↵.

search path
A list of directories set by the PATH command that DOS looks through to find an *executable* file.

executable files
Files that do a task (program files, external DOS commands, or batch files). *Executable files* end with .EXE, .COM, or .BAT.

Using the PATH command

The PATH command lets you set a *search path* (list of directories) so DOS can find *executable files* (files ending with .EXE, .COM, or .BAT). Once a *search path* is set for an *executable file*, you need not type that path when you give the command to *run* the file.

The PATH command in an AUTOEXEC.BAT file may look something like this:

```
C:\DOS; C:\WINDOWS; C:\MOUSE; C:\ZIP; C:\WP60; C:\CPAV
```

directory the executable file is in
root directory
disk drive
semicolons that separate the paths are bolded in this example

In the PATH command above, there is: a *series* of paths to different directories; each path is separated from other paths by a semicolon (;), and each path *starts with the disk drive* the *executable file* is on. Starting the path with the disk drive lets you issue the command to start an *executable file* from a different drive.

Remember that *external DOS commands* are *executable files* usually found in the DOS directory on drive C:. You would not want to type C:\DOS\ in front of every external DOS command you issued. When the path to the DOS directory is already set in the computer's memory, you do not have to think about where the command is; all you have to remember is the name of the command. Normally, you do not put a path to every program on your hard disk in your PATH statement — you only put paths to the programs that you use frequently. When you issue a command to start a program, DOS first looks for that program file in the *current* directory. If DOS cannot find the program file in the *current* directory, DOS looks in the first *path* in the PATH command, and if it cannot find the program file there, it looks in the next *path*, and so on. Since it takes time to look through each directory, you want to put the most frequently searched directories, such as DOS, at the beginning of the PATH command.

❶ • If necessary, **access** the DUPLICATE Learning Disk on drive A: and **change** to this common DOS prompt: `A:\>`

❷ Display the current search path:

- **Type** `PATH` ↵
  DOS will probably display a path statement that looks similar to the path statement illustrated above.

  NOTE: The path statement that DOS displays (if there is one) was loaded into the computer's memory by the PATH command that was found in AUTOEXEC.BAT.

❸ Clear the search path:

- **Type** `PATH;` ↵
  Nothing seems to happen, but DOS erases your existing path and returns you to the DOS prompt.

```
A:\>
```

- **Type** `PATH` ↵
  DOS reports "No Path."

```
No Path
```

Exercise 66 continued...

❹ Run a program that is not in the current directory:

(run the SS.EXE program in the PROGRAMS directory)

- **Type** SS ↵

```
Bad command or file name
```

NOTE: Since there is NO path to the SS.EXE file, DOS cannot find the SS.EXE program.

❺ Set a search path in the computer's memory:

*IMPORTANT: Be very careful to type the command below **exactly** as it is shown. The only space is after PATH.*

- **Type** PATH C:\DOS;C:\MOUSE;A:\PROGRAMS ↵

Nothing seems to happen, but DOS sets a new search path, and then returns you to the DOS prompt.

```
A:\>
```

- **Type** PATH ↵

DOS displays the path you just entered.

```
PATH=C:\DOS;C:\MOUSE;A:\PROGRAMS
```

❻ Run a program that is in the search path:

(run the SS.EXE program in the PROGRAMS directory)

- **Type** SS ↵

```
                    * * * Spreadsheet Program * * *

If this was a real spreadsheet program

you would use it to:

     * Type in numbers to be calculated.
     * Type formulas to specify how the numbers will be calculated.
     * Save your spreadsheets to disk files.
     * Print your spreadsheets.

Press <Enter> to exit this program ?
```

*NOTE: Since the PATH command you just entered had a **path** to the SS.EXE file, DOS found and executed the SS.EXE program.*

- **Press** ↵

```
A:\>
```

❼

- **Go on** to Exercise 67
  or **take** the disk out of drive A: and turn the computer off.

STEPS to

Display the current search path

- Type PATH ↵

Clear the current path

- Type PATH; ↵

Set a search path

1. Type PATH
2. Press Space
3. Type the letter of the drive that holds the directory an executable file(s) is in.
4. Type :
5. Type \
6. Type the remaining path to the executable file(s).
7. Type ;
8. Repeat steps 3-7 until the paths to all the executable files are entered.
9. Delete the final semicolon, if there is one.
10. Press ↵

EXERCISE 67

ECHO

Used mainly in *batch files* to turn the *command echoing* feature on or off, or display a message.

OBJECTIVES:

- turn echo off
- display the current status of echo
- echo a message
- turn echo back on
- echo a blank line

STEPS to

Turn ECHO off
- **Type** ECHO OFF ↵

Turn ECHO on
- **Type** ECHO ON ↵

Display the status of ECHO
- **Type** ECHO ↵

ECHO a message
1 **Type** ECHO
2 **Press** Space
3 **Type** the message you want to display.
4 **Press** ↵

ECHO a blank line
- **Type** ECHO. ↵

Using the ECHO command

The DOS prompt, the commands you issue, and the results of the commands you issue are not only held in the computer's memory, but they are repeated (echoed) on your monitor, so you can see them.

When running a batch file, you may not want your screen to be cluttered with command messages. You can use the ECHO command to turn the monitor echo off and on. You can also use the ECHO command to display a message in a batch file.

This exercise helps you get acquainted with the ECHO command at the DOS prompt, although it is normally used within *batch files*.

❶ • If necessary, **access** the DUPLICATE Learning Disk on drive A: and **change** to this common DOS prompt: `A:\>`

❷ Turn echo off:

- **Type** ECHO OFF ↵.

Only the cursor is displayed on the next line; the DOS prompt disappears.

```
A:\>
_
```

❸ Display the current status of ECHO (on or off):

- **Type** ECHO ↵.

DOS reports the status of ECHO; it is currently off.

```
ECHO is off
```

❹ Echo a message:

- **Type** ECHO This message will be echoed. ↵

```
ECHO This message will be echoed.
This message will be echoed.
_
```

❺ Turn ECHO back on:

- **Type** ECHO ON ↵.

```
ECHO ON

A:\>
```

❻ Echo a blank line:

- **Type** ECHO. ↵.

DOS displays a blank line.

```

A:\>
```

❼ • **Display** the current status of ECHO (review, step 3).

DOS reports the status of ECHO; it is currently on.

```
ECHO is on
```

❽ • **Go on** to Exercise 68
or **take** the disk out of drive A: and turn the computer off.

EXERCISE 68

PAUSE

Temporarily stops a batch file and prompts the user to press any key to continue.

OBJECTIVES:

- identify the reason for using PAUSE
- use the PAUSE command at the DOS prompt
- create a batch file which uses PAUSE
- run the batch file
- see what happens when you take PAUSE out of a batch file

Using the PAUSE command

You use PAUSE to stop a batch file so you can read a message that may be displayed. Without PAUSE, messages usually flash by so quickly that you cannot see them, as the batch file hurries to process the remaining commands.

1

- If necessary, **access** the DUPLICATE Learning Disk on drive A: and **change** to this common DOS prompt: `A:\>`

2 **Use the PAUSE command at the DOS prompt:**

- **Type** `PAUSE` ↵

  DOS stops and waits for you to "Press any key to continue..."

```
Press any key to continue . . .
```

- **Press** any key.

```
A:\>
```

3 **Create a batch file that uses PAUSE:**

- **Type** `EDIT STOP.BAT` ↵

  DOS Editor opens a new (clear) screen with the title STOP.BAT.

- **Type** the following *batch file*, pressing ↵ at the end of each line.

```
ECHO OFF
CLS
ECHO.
ECHO This batch file uses the ECHO command to display
ECHO a message.  The batch file also uses the ECHO
ECHO command to put a blank line above and below the
ECHO message.  The PAUSE command is used so you can
ECHO have enough time to read the message.
ECHO.
PAUSE
CLS
```

- **Print** this text file (review, Exercise 57, page 145).
- **Save** the file and **exit** DOS Editor (review, page 167, step 4).

4 **Run the batch file:**

- **Type** `STOP` ↵

```
This batch file uses the ECHO command to display
a message.  The batch file also uses the ECHO
command to put a blank line above and below the
message.  The PAUSE command is used so you can
have enough time to read the message.

Press any key to continue . . .
```

- **Press** any key.

```
A:\>
```

5 **See what happens when you take PAUSE out:**

- **Type** `EDIT STOP.BAT` ↵

  DOS Editor opens and displays the STOP.BAT batch file.

- **Delete** `PAUSE` and the line it was on (review, page 154).
- **Save** the file and **exit** DOS Editor (review, page 167, step 4).
- **Type** `STOP` ↵

  *DOS processes the batch file without **pausing** for the message, which is quickly cleared away with the CLS command. Run the file a few more times, and look closely.*

6

- **Go on** to Exercise 69

  or **take** the disk out of drive A: and turn the computer off.

EXERCISE 69

Create a batch file that uses data files

OBJECTIVES:

- create a data file to be used in a batch file
- exit DOS Editor and save the *batch file* using *one* command
- display the contents of a *text file* using the TYPE command at the DOS prompt
- create a *batch file* that displays the contents of another *text file*
- run a batch file
- remove commands from a batch file and examine the change in the result:
  - remove the first CLS command
  - remove the @ in front of ECHO OFF
  - remove the ECHO OFF command
- type REM in front of a command in a batch file to disable it
- examine each command in the original batch file
- change the MESS.BAT file

– Terms and Notes –

NOTE: Use this directory structure to help you know where you are working within the directory structure.

```
A:.
├──GAMES
├──FOOD
│   ├──VEGGIES
│   └──GOODIES
├──PROGRAMS
│   └──DATA
│       ├──SS
│       ├──DB
│       ├──WP
│       ├──LETTERS
│       ├──MEMOS
│       └──REPORTS
├──TEMP
└──MISC
```

❶ • If necessary, **access** the DUPLICATE Learning Disk on drive A: and **change** to this common DOS prompt: `A:\>`

❷ Create a data file to be used in a batch file:

Be aware of where you are in the directory structure. You will *change* to the *PROGRAMS directory* and remain there during this entire exercise.

- **Change** to the PROGRAMS directory (review, Exercise 14).

```
A:\PROGRAMS>
```

- **Type** `EDIT MESS1.DAT` ↵
  DOS Editor opens a new (clear) screen with title MESS1.DAT.
- **Type** the following *data file*, pressing ↵ at the end of each line.

```
*****************************************
              MESSAGE ONE
*****************************************

There is a surprise waiting in message two.
```

❸ Exit DOS Editor and save the batch file using one command:

- **Press** Alt + F (File), X (Exit).
  This message appears telling you that the "Loaded file is not saved" and asking if you want to "Save it now?" The < Yes > command button is selected:

```
┌──────────────────────────────────────────────────┐
│ Loaded file is not saved. Save it now?           │
├──────────────────────────────────────────────────┤
│ < Yes >   < No >   <Cancel>   < Help >           │
└──────────────────────────────────────────────────┘
```

- **Press** ↵ (to choose Yes, Save it now).
  *DOS **saves** the text file **and exits** to the DOS prompt.*

```
A:\PROGRAMS>
```

❹ Display the contents of a text file using the TYPE command at the DOS prompt:

- **Type** `TYPE MESS1.DAT` ↵

```
*****************************************
              MESSAGE ONE
*****************************************

There is a surprise waiting in message two.
```

❺ Create a batch file to use the data file you just created:

- **Type** `EDIT MESS.BAT` ↵
  DOS Editor opens and displays the MESS.BAT batch file.
- **Type** the following *data file*, pressing ↵ at the end of each line.

```
CLS
@ECHO OFF
TYPE MESS1.DAT
PAUSE
CLS
```

- **Press** Alt + F (File), X (Exit), ↵ (to exit DOS Editor and save).

*NOTE: Using @ in front of ECHO OFF makes the command effective at the **beginning** rather than at the **end** of the command (see step 8).*

Exercise 69 continued...

❻ Run the batch file you just created:

- **Type** MESS ↵ (to run MESS.BAT).

```
****************************************
              MESSAGE ONE
****************************************

There is a surprise waiting in message two.

Press any key to continue . . .
```

- **Press** any key.

```
A:\PROGRAMS>
```

Remove commands from the batch file

In the next four steps, you will delete selected commands from the *batch file*. Then you will *run* the *batch file* and examine the changed result, so you can better understand what the commands do.

❼ Remove the first CLS and examine the change in the result:

- **Edit** MESS.BAT (review, step 5).
  DOS Editor opens and displays the MESS.BAT batch file.
- **Delete** the first CLS command *and* the line it is on.
- **Save** the changes to MESS.BAT and **exit** DOS Editor.
- **Run** MESS.BAT (review, step 6).
  Compare this result with the result in step 6. Because you removed the first CLS command, the last two commands you issued are still displayed on the screen.

```
A:\PROGRAMS>EDIT MESS.BAT  ←

A:\PROGRAMS>MESS           ←
****************************************
              MESSAGE ONE
****************************************

There is a surprise waiting in message two.

Press any key to continue . . .
```

- **Press** any key.
  The screen is cleared by the final CLS command in MESS.BAT, and you are returned to a DOS prompt.

```
A:\PROGRAMS>
```

❽ Remove the @ in front of ECHO OFF:

NOTE: Using @ in front of ECHO OFF makes the command effective at the ***beginning*** *rather than at the* ***end*** *of the command.*

- **Edit** MESS.BAT (review, step 5).
  DOS Editor opens and displays the MESS.BAT batch file.
- **Delete** @ *and* the line it is on.
- **Save** the changes to MESS.BAT and **exit** DOS Editor.
- **Run** MESS.BAT (review, step 6).
  Compare this result with the result in step 7. Because you removed the @ in front of ECHO OFF, the ECHO OFF command, itself, is displayed.

```
A:\PROGRAMS>EDIT MESS.BAT
A:\PROGRAMS>MESS
A:\PROGRAMS>ECHO OFF       ←
****************************************
              MESSAGE ONE
****************************************

There is a surprise waiting in message two.

Press any key to continue . . .
```

Exercise 69 continued...

STEPS to

Create a data file

1. **Type** EDIT
2. **Press** Space
3. **Type** the filename for the data file, ending it with .DAT.
4. **Press** ↵
5. **Type** the text for the data file.
6. **Press** Alt + F (File), X (Exit), ↵

Create a batch file that uses a data file

1. **Type** EDIT
2. **Press** Space
3. **Type** the name for the batch file, ending it with .BAT.
4. **Press** ↵
5. **Type** the commands up to the command that uses the data file.
6. **Type** TYPE
7. **Press** Space
8. **Type** the name of the data file to display.
9. **Type** the remaining command in the batch file.
10. **Press** Alt + F (File), X (Exit), ↵

– Terms and Notes –

REM (remark)
A *batch file* command that lets you add a comment to a batch file without affecting the way the batch file runs. You can also use REM to temporarily disable a command in a batch file.

Step 8 (continued)

- **Press** any key.
  The screen is cleared, and the DOS prompt appears at the top of the screen.

```
A:\PROGRAMS>
```

❾ Remove ECHO OFF:

- **Edit** MESS.BAT (review, step 5).
- **Delete** `ECHO OFF` *and* the line it is on.
- **Save** the changes to MESS.BAT and **exit** DOS Editor.
- **Run** MESS.BAT (review, step 6).
  Compare this result with the result in step 8. Because you removed ECHO OFF, the commands in the batch file are displayed (echoed) on the screen.

```
A:\PROGRAMS>EDIT MESS.BAT

A:\PROGRAMS>MESS

A:\PROGRAMS>TYPE MESS1.DAT ←
*****************************************
              MESSAGE ONE
*****************************************

There is a surprise waiting in message two.

A:\PROGRAMS>PAUSE          ←
Press any key to continue . . .
```

- **Press** any key.
  The screen is cleared and two DOS prompts appear at the top of the screen.

```
A:\PROGRAMS>
A:\PROGRAMS>
A:\PROGRAMS>
```

❿ Remove the final CLS command:

A common way to troubleshoot a command in a batch file is to type REM in front of the command to be tested; then DOS cannot execute the command, and you can see the effect of omitting the command. This is called "REMing out a command." When you want the command to be executed again, you simply delete the "REM" in front of the command. This is especially useful for temporarily disabling a long command that you do not want to retype later.

- **Edit** MESS.BAT (review, step 5).
- **Type** `REM` *and* **press** Space in front of `CLS` so it looks like this:
  `REM CLS`
- **Save** the changes to MESS.BAT and **exit** DOS Editor.
- **Run** MESS.BAT (review, step 6).
- **Press** any key.
  Compare this result with the result in step 9. Because you "REMed out" the CLS command, the screen is not cleared at the end of the batch file.

```
A:\PROGRAMS>
A:\PROGRAMS>EDIT MESS.BAT

A:\PROGRAMS>MESS

A:\PROGRAMS>TYPE MESS1.DAT
*****************************************
              MESSAGE ONE
*****************************************

There is a surprise waiting in message two.

A:\PROGRAMS>PAUSE
Press any key to continue . . .


A:\PROGRAMS>
A:\PROGRAMS>
```

Exercise 69 continued...

⓫ Examine each command in the original batch file:

The last screen illustration (step 10) looks like a *mess* (it is cluttered with commands and prompts) when compared to the screen illustration in step 6. Now you can more clearly understand the value of each command in this original batch file:

CLS	- starts the batch file with a clear screen
@ECHO OFF	- suppresses the *screen display* of the batch file commands
TYPE MESS1.DAT	- displays the contents of MESS1.DAT on the screen
PAUSE	- temporarily stops the batch file so you can read a message
CLS	- clears the screen at the end of the batch file

⓬ Create message two for MESS.BAT:

- **Type** `EDIT MESS2.DAT` ↵ (review, step 5).
  DOS Editor opens a new (clear) screen with the title MESS2.DAT.
- **Type** the following *data file*, pressing ↵ at the end of each line.

```
**********************************************
                MESSAGE TWO
**********************************************

The surprise is that this batch file works!
```

- **Save** the changes to MESS2.DAT and **exit** DOS Editor.

⓭ Change the MESS.BAT file:

- **Type** `EDIT MESS.BAT` ↵
- **Change** MESS.BAT to match the batch file below.

```
CLS
@ECHO OFF
TYPE MESS1.DAT
PAUSE
CLS
TYPE MESS2.DAT
PAUSE
CLS
```

- **Print** this text file (review, Exercise 57, page 145).
- **Save** the changes to MESS.BAT and **exit** DOS Editor.

⓮ Run MESS.BAT:

- **Type** `MESS` ↵

```
**********************************************
                MESSAGE ONE
**********************************************

There is a surprise waiting in message two.

Press any key to continue . . .
```

- **Press** any key.

```
**********************************************
                MESSAGE TWO
**********************************************

The surprise is that this batch file works!

Press any key to continue . . .
```

- **Press** any key.

```
A:\PROGRAMS>
```

- **Change** to the *root* directory.

```
A:\>
```

⓯ • **Go on** to Exercise 70
or **take** the disk out of drive A: and turn the computer off.

EXERCISE 70

Create a batch file that backs up files

OBJECTIVES:

- create a batch file that backs up (copies) files and lists the copied files
- use the REM batch file command
- run the batch file

– Terms and Notes –

NOTE: In a batch file, when using commands that specify files, you should always use the complete directory path (starting with the root directory).

❶
- If necessary, **access** the DUPLICATE Learning Disk on drive A: and **change** to this common DOS prompt: `A:\>`

❷ **Create a batch file that backs up files and lists the copied files:**

- **Type** `EDIT BACKUP.BAT` ↵
  DOS Editor opens a new (clear) screen with the title BACKUP.BAT.
- **Type** the following *data file*, pressing ↵ at the end of each line.

```
@ECHO OFF
REM This batch file backs up the LETTERS directory.
CLS
COPY \PROGRAMS\DATA\LETTERS\*.* \TEMP
DIR \TEMP
PAUSE
CLS
```

- **Save** the changes to BACKUP.BAT and **exit** DOS Editor.

```
A:\>
```

NOTE: A REM statement that is executed while ECHO is on will be displayed on the screen (although it may not be there long enough to see).

❸ **Run the batch file you just created:**

- **Run** BACKUP.BAT (review, Exercise 69).

```
A:\PROGRAMS\DATA\LETTERS\JONES.LET
A:\PROGRAMS\DATA\LETTERS\SMITH.LET
A:\PROGRAMS\DATA\LETTERS\LOPEZ.LET
A:\PROGRAMS\DATA\LETTERS\LETTER1
A:\PROGRAMS\DATA\LETTERS\LETTER2
A:\PROGRAMS\DATA\LETTERS\LETTER3
        6 file(s) copied

 Volume in drive A is LEARNING
 Volume Serial Number is XXXX-XXXX
 Directory of A:\TEMP

.            <DIR>      09-07-93   7:51p
..           <DIR>      09-07-93   7:51p
JONES    LET           9 05-02-93   7:48p
SMITH    LET           9 05-02-93   8:13p
LOPEZ    LET           9 05-02-93   8:13p
LETTER1                7 05-02-93   8:15p
LETTER2                7 05-02-93   8:16p
LETTER3                7 05-02-93   8:22p
        8 file(s)          48 bytes
                      182272 bytes free
Press any key to continue . . .
```

- **Press** any key.

```
A:\>
```

- **Run** BACKUP.BAT again and **press** ↵ to end PAUSE.

```
A:\>
```

❹
- **List** the contents of the *root* directory.
  DOS stores each batch file in the first available spot.

```
 Directory of A:\

GAMES        <DIR>      05-02-93   7:46p
FOOD         <DIR>      05-02-93   7:46p
PROGRAMS     <DIR>      05-22-93   8:41p
TEMP         <DIR>      05-22-93   9:45p
WORD     BAT        24 10-15-93   4:54p
STOP     BAT       299 10-15-93   4:58p
MISC         <DIR>      05-22-93   9:44p
BACKUP   BAT       132 10-15-93   7:05p
        8 file(s)          455 bytes
                       XXXXXXX bytes free
```

NOTE: Your batch files may vary slightly in size from those in the result above, and they may appear in a different order.

❺
- **Go on** to Exercise 71
  or **take** the disk out of drive A: and turn the computer off.

EXERCISE 71

Delete batch files

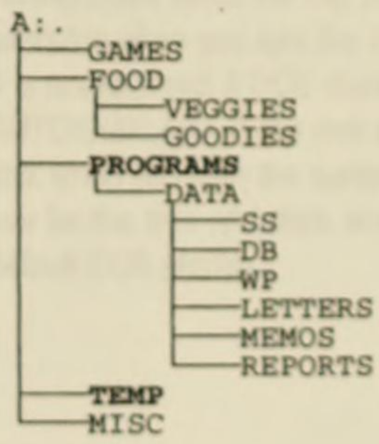
OBJECTIVES:

- delete the batch files in root directory
- delete the MESS files in the PROGRAMS directory
- delete the *backed up* files from the TEMP directory

- Terms and Notes -

NOTE: Remember that when you delete files, you should first *list* the files using the same *filename pattern* that you will use to *delete* the files. Look at the display and be sure the files you want to delete and *only* the files you want to delete are listed. Next, *delete* the files. And finally, *list* the files using the same *filename pattern* again (expecting to get a "File not found" message) to be sure the files are deleted.

NOTE: Use this directory structure to help you know where you are working within the directory structure.



❶

- If necessary, **access** the DUPLICATE Learning Disk on drive A: and **change** to this common DOS prompt: `A:\>`

❷ Delete the batch files in root directory:

- **Change** to the root directory, if necessary.

```
A:\>
```

- **Type** `DIR *.BAT` ↵

```
WORD       BAT        22 09-18-93   11:26p
STOP       BAT       293 09-18-93   11:45p
BACKUP     BAT        82 09-19-93    9:50p
        3 file(s)          397 bytes
                       XXXXXX bytes free
```

- **Type** `DEL *.BAT` ↵

```
A:\>
```

- **Type** `DIR *.BAT` ↵

```
File not found
```

❸ Delete the MESS files in the PROGRAMS directory:

- **Type** `CD PROGRAMS` ↵

```
A:\PROGRAMS>
```

- **Type** `DIR MESS?.*` ↵

```
MESS1      DAT       166 09-19-93    8:53p
MESS2      DAT       166 09-19-93    8:54p
MESS       BAT        72 09-19-93    9:47p
        3 file(s)          404 bytes
                       XXXXXX bytes free
```

- **Type** `DEL MESS?.*` ↵

```
A:\PROGRAMS>
```

- **Type** `DIR MESS?.*` ↵

```
File not found

A:\PROGRAMS>
```

❹ Delete the files in the TEMP directory:

- **Type** `CD\TEMP` ↵
  NOTE: You must use the full path (\TEMP) to change to TEMP, since you are changing from one ***subdirectory of the root*** *to another* ***subdirectory of the root****.*

```
A:\TEMP>
```

- **Type** `DIR` ↵

```
 Directory of A:\TEMP

.              <DIR>       09-07-93    7:51p
..             <DIR>       09-07-93    7:51p
JONES      LET             9 05-02-93    7:48p
SMITH      LET             9 05-02-93    8:13p
LOPEZ      LET             9 05-02-93    8:13p
LETTER1                    7 05-02-93    8:15p
LETTER2                    7 05-02-93    8:16p
LETTER3                    7 05-02-93    8:22p
        8 file(s)             48 bytes
                       XXXXXX bytes free
```

- **Type** `DEL *.*` ↵

```
All files in directory will be deleted!
Are you sure (Y/N)?
```

- **Type** `Y` ↵

```
A:\TEMP>
```

- **Change** to the *root* directory (review, Exercise 14)

```
A:\>
```

❺

- **Go on** to Exercise 72
  or **take** the disk out of drive A: and turn the computer off.

EXERCISE 72

Terminate a batch file

End a batch file before all the commands in it are executed.

OBJECTIVES:

- run a batch file
- terminate a batch file

- Terms and Notes -

NOTE: The same command that is used to *cancel a command*, Ctrl + C (or Ctrl + Break) is used to *terminate* a batch file.

STEPS to

Terminate a batch file

While a batch file is being executed:

1 **Press** Ctrl + C
DOS asks if you want to "Terminate batch job (Y/N)?"

2 **Press** Y

1 • If necessary, **access** the DUPLICATE Learning Disk on drive A: and **change** to this common DOS prompt: `A:\>`

2 • **Change** to the PROGRAMS directory.

```
A:\PROGRAMS>
```

3 **Run a batch file:**

• **Type** SHOWME ↵

```
                    DOS COMMANDS & EXAMPLES

This batch file program uses the TYPE command
to show DOS commands and examples.
You can press any key until you get to the command you want help on.
Press any key to continue . . .
```

• **Press** any key.

```
                    CD -- CHANGE DIRECTORY

Use the CD command to:
  * show the current directory
  * change to a specified directory
examples:
=========
CD          show current directory
CD\DOS      change to the DOS directory
CD..        change to the parent directory
CD Level2   change to the LEVEL2 directory below current directory
Press any key to continue . . .
```

• **Press** any key.

```
                    CLS -- CLEAR SCREEN

Use the CLS command to clear the screen and show the DOS prompt at
the top of the screen.
example:
========
CLS
Press any key to continue . . .
```

• **Press** any key.

```
A:\PROGRAMS>
```

4 **Terminate a batch file:**

• **Run** SHOWME.BAT (review, step 3).

```
                    DOS COMMANDS & EXAMPLES

This batch file program uses the TYPE command
to show DOS commands and examples.
You can press any key until you get to the command you want help on.
Press any key to continue . . .
```

• **Press** Ctrl + C

```
^C
Terminate batch job (Y/N)?
```

• **Press** Y
DOS stops the batch file and returns you to the DOS prompt.

```
A:\PROGRAMS>
```

• **Change** to the *root* directory.

```
A:\>
```

5 • **Go on** to Exercise 73
or **take** the disk out of drive A: and turn the computer off.

EXERCISE 73

Create AUTO.BAT

Create a batch file on a floppy disk that mimics the AUTOEXEC.BAT file on the hard disk.

OBJECTIVES:
- create AUTO.BAT
- examine the commands in AUTO.BAT
- run AUTO.BAT

– Terms and Notes –

NOTE: This book has directed you to use the name AUTO.BAT to create this AUTOEXEC.BAT-like batch file. You can put an AUTOEXEC.BAT batch file on any floppy disk, and use it to boot the computer. This book has chosen to use AUTO.BAT at this time in order to minimize the possibility of accidentally accessing AUTOEXEC.BAT on your hard disk.

AUTOEXEC.BAT
An important *batch file* that DOS looks for and executes when you turn the computer on. It is not required; if DOS does not find AUTOEXEC.BAT in the root directory of the boot disk when you start the computer, DOS prompts you for the *time* and *date*, and then displays the default DOS prompt.

❶
- If necessary, **access** the DUPLICATE Learning Disk on drive A: and **change** to this common DOS prompt: `A:\>`

❷ Create the AUTO.BAT batch file:
- **Type** `EDIT A:\AUTO.BAT` ↵
  DOS Editor opens a new (clear) screen with the title AUTO.BAT.
- **Type** the following *data file*, pressing ↵ at the end of each line.

```
@ECHO OFF
CLS
PROMPT $P$G
PATH C:\DOS;C:\MOUSE;A:\PROGRAMS
WP
CLS
```

- **Save** AUTO.BAT and **exit** DOS Editor.

```
A:\>
```

❸ Examine each command in the AUTO.BAT file:
The AUTO.BAT file will set the common DOS prompt and path statement, and then it will run a "mock" word processing program (WP.EXE). When you exit the word processing program, DOS returns to the batch file and clears the screen before it ends AUTO.BAT and returns you to the DOS prompt.

this command	does this
@ECHO OFF	suppresses the *screen display* of commands
CLS	clears the screen
PROMPT PG	sets the common DOS prompt
PATH C:\DOS;C:\MOUSE;A:\PROGRAMS	sets paths in the computer's memory
WP	runs the WP.EXE program
CLS	clears the screen

NOTE: This book instructs you to have AUTO.BAT start WP.EXE in order to make you aware that starting a program from AUTOEXEC.BAT is a common practice. People often have AUTOEXEC.BAT start a ***menu*** *program (from which they choose the program they want to run),* ***Windows****, or the program they most frequently use.*

❹ Run AUTO.BAT:
- **Type** `AUTO` ↵
  After DOS sets the DOS prompt and path statement, it starts the word processing program.

```
                    * * * Word Processing Program * * *
If this was a real word processing program
you would use it to:
     * Type in text to create documents.
     * Edit (revise) what you have typed.
     * Format text (such as underline, bold, and center).
     * Save your documents to disk files.
     * Print your documents.
Press <Enter> to exit this program ?
```

- **Press** ↵
  DOS returns you to the directory the batch file is in even though the "mock" word processing program is in the PROGRAMS directory.

```
A:\>
```

❺
- **Go on** to Exercise 74
  or **take** the disk out of drive A: and turn the computer off.

EXERCISE 74

SYS

Copies DOS *system files* and COMMAND.COM to a disk you specify, making the disk a *system (bootable) disk*.

OBJECTIVES:

- identify why you might want a floppy *system disk*
- make the Duplicate Learning Disk a *system disk*
- boot the computer with a floppy *system disk*
- examine the path setting
- examine the *default* DOS prompt
- put an AUTOEXEC.BAT file on the Duplicate Learning Disk
- boot the computer with a floppy *system disk* which contains AUTOEXEC.BAT
- examine the differences in how the computer boots

- Terms and Notes -

system disk
A disk that contains the *system* files needed to start up or *boot* the computer. Also called bootable disk.

warm boot
The process of *restarting* the computer by simultaneously pressing Ctrl, Alt, and Del instead of using the on/off switch.

hidden system files
System files that DOS puts on a *system disk* when you use the SYS command. You cannot see or access them, but they are there and they take up space. DOS puts *hidden system files* at the beginning of the disk and will bump files that are stored at the beginning to a new location.

COMMAND.COM
The *system file* that contains DOS's *internal commands* and that DOS puts on a *system disk* when you use the SYS command.

Why do you need a bootable floppy disk?

It is a good safeguard to have a floppy *system disk* (that fits in drive A:) with a copy of the hard disk's AUTOEXEC.BAT and CONFIG.SYS files on it. If your hard disk should have a problem, you (or a computer technician) can *boot* the computer with this floppy *system disk* and possibly correct the problem.

❶
- If necessary, **access** the DUPLICATE Learning Disk on drive A: and **change** to this common DOS prompt: `A:\>`

❷
- **Type** `C:` ↵ (to change to drive C:).
- **Type** `CD\` ↵ (to change to the root directory, if necessary).

```
C:\>
```

*NOTE: The **disk drive** that holds the disk that you want to make into a **system disk** cannot be current when you issue the SYS command.*

❸ Make the Duplicate Learning Disk a system disk:

- **Type** `SYS A:` ↵

*IMPORTANT: SYS is an **external command**. If you get a **Bad command or file name** message, **C:\DOS** is not in the PATH command of your AUTOEXEC.BAT file. However, you can probably complete this exercise if you type PATH C:\DOS ↵ and repeat step 3 (see Exercise 66, page 168).*

After working for a while, DOS reports "System transferred."

```
C:\>
System transferred
```

DOS works some more and then displays a new prompt.

```
C:\>
```

IF you get this message:

```
Could not copy COMMAND.COM onto target disk
```

- **Type** `COPY \DOS\COMMAND.COM A:\` ↵

❹ Boot the computer with a floppy system disk:

- **Keep** the Duplicate Learning Disk in drive A:, and if there is a latch on the disk drive, make sure it is closed.
- **Hold down** both Ctrl and Alt *while* you **press and release** Del, then **release** both Ctrl and Alt

*NOTE: This procedure is called a **warm boot**; it restarts the computer without turning the switch off and on.*

The computer starts its boot process. In a little while, the drive A: light comes on and in a little while more, DOS reports the current date and prompts you for a new date.

```
Current date is  Fri 07-09-1993
Enter new date (mm-dd-yy):
```

- **Press** ↵ (to accept the *reported* date).

DOS reports the current time and prompts you for a new time.

```
Current time is   7:34:01.50p
Enter new time:
```

- **Press** ↵ (to accept the *reported* time).

*DOS 5 displays the **default** DOS prompt.*

```
A>
```

*DOS 6 displays the **common** DOS prompt.*

```
A:\>
```

IF you are using DOS 6:

- **Type** `PROMPT` ↵ (to display the default prompt so you will get the expected result in step 6).

```
A>
```

Exercise 74 continued...

❺ Examine the search path:

- **Type** `PATH` ↵

```
No path
```

NOTE: When you start the computer without AUTOEXEC.BAT, there is no path statement set in the computer's memory.

❻ Change to a different directory and examine the prompt:

- **Type** `CD TEMP` ↵

*The DOS prompt does not change — it displays only the **current drive** and the **greater-than sign** — not the path to the directory you are in, as the **common** DOS prompt does.*

```
A>
```

- **Type** `DIR` ↵

The third line of the output tells you that you are in the TEMP directory even though the prompt does not tell you what directory you are in.

```
 Volume in drive A is LEARNING
 Volume Serial Number is XXXX-XXXX
 Directory of A:\TEMP    ← path to the current
directory

.            <DIR>      09-07-93   7:51p
..           <DIR>      09-07-93   7:51p
       2 file(s)              0 bytes
                          72704 bytes free
```

- **Type** `CD\` ↵ (to change back to the root directory).

Dos displays the default prompt.

```
A>
```

❼ Rename AUTO.BAT to AUTOEXEC.BAT:

- **Type** `REN A:\AUTO.BAT \AUTOEXEC.BAT` ↵

You now have a system disk with an AUTOEXEC.BAT file on it. What will happen when you boot the computer with this disk now?

❽ Boot the computer with a floppy system disk which contains AUTOEXEC.BAT:

- **Warm boot** the computer with the Duplicate Learning Disk in drive A: (review, step 4, first two bullets).

After DOS sets the DOS prompt and search path, it starts WP.EXE.

```
                    * * * Word Processing Program * * *
If this was a real word processing program
you would use it to:
     * Type in text to create documents.
     * Edit (revise) what you have typed.
     * Format text (such as underline, bold, and center).
     * Save your documents to disk files.
     * Print your documents.
Press <Enter> to exit this program ?
```

- **Press** ↵

*DOS displays the **common** DOS prompt (the **current drive and path** and the **greater-than sign**).*

```
A:\>
```

Because DOS found and executed the AUTOEXEC.BAT file you created,

- DOS did not prompt you for the *date* and *time*
- DOS did change the *default* prompt to the *common* DOS prompt (for DOS 5 users)
- DOS did set a search path, and
- DOS did start the word processing program, WP.EXE

Exercise 74 continued...

Exercise 74 (continued)

SYS

NOTE: DOS will boot the computer with a floppy disk from drive A: only.

NOTE: When you boot a *system disk* without an AUTOEXEC.BAT file, DOS will prompt you for the *date* and *time*.

When you boot a *system disk* with an AUTOEXEC.BAT file, DOS does not prompt you for the *date* or *time*.

NOTE: The computer *must* have a *system disk* (boot disk) to be able to start the computer. Usually, the *hard disk* is the disk that has the *system files*, but you can also boot the computer with a *floppy system disk*.

STEPS to

Create a *system* disk

1 **Change** to the *root* directory on drive C:.
2 **Type** `SYS`
3 **Press** Space
4 **Type** the letter of the drive which holds the disk you want to make a system disk of.
5 **Press** :
6 **Press** ↵

DOS works for a while then reports "System transferred." DOS works some more, then displays the DOS prompt.

DOS 6 NOTE: COMMAND.COM is given a *read-only attribute* in DOS 6. When a file has a read-only attribute, you cannot change the file, so of course, you cannot delete it. Even though the ATTRIB command is not covered in this book, you are instructed to use ATTRIB to remove the read-only attribute and then delete COMMAND.COM.

⑨ Examine the search path and the DOS prompt:

- **Type** PATH ↵

```
PATH=C:\DOS;C:\MOUSE;A:\PROGRAMS
```

- **Type** CD TEMP ↵

  DOS displays the path to the current directory, so you can easily see what directory you are in.

```
A:\TEMP>
```

- **Type** CD\ ↵

```
A:\>
```

⑩ Delete AUTOEXEC.BAT and COMMAND.COM from the floppy disk:

These files must be deleted before you do the Practice Exercise that follows, and Lesson Eight, DOS Shell. (The hidden system files will not be deleted.)

- **Type** DIR ↵

  *DOS lists the files in the **root** directory.*

```
 Directory of A:\
FOOD          <DIR>      05-02-93   7:46p
PROGRAMS      <DIR>      05-22-93   8:41p
TEMP          <DIR>      09-07-93   7:51p
AUTOEXEC BAT          72 XX-XX-XX   X:XXX
MISC          <DIR>      09-07-93   7:42p
GAMES         <DIR>      05-02-93   7:46p
COMMAND  COM      XXXXX XX-XX-XX   X:XXX
        7 file(s)       XXXXX bytes
                        XXXXX bytes free
```

- **Type** DEL A:\AUTOEXEC.BAT ↵

  NOTE: Notice that the disk drive and path are entered as part of the command to delete AUTOEXEC.BAT. Why? The disk drive and path are parameters that tell DOS exactly where to go, and they are being used as a safety precaution against accidentally deleting AUTOEXEC.BAT from the hard disk.

- **Type** DEL A:\COMMAND.COM ↵

  IF you are using DOS 6, you will get this message:

```
Access denied
```

  IF the "Access denied" message appears, follow these steps to delete COMMAND.COM:

  - **Type** ATTRIB -R A:\COMMAND.COM ↵
  - **Type** DEL A:\COMMAND.COM ↵

- **Type** DIR ↵

```
 Directory of A:\
FOOD          <DIR>      05-02-93   7:46p
PROGRAMS      <DIR>      05-22-93   8:41p
TEMP          <DIR>      09-07-93   7:51p
GAMES         <DIR>      05-02-93   7:46p
MISC          <DIR>      09-07-93   7:42p
        7 file(s)              0 bytes
                        XXXXX bytes free
```

Do you notice anything different about the order of the directories? The GAMES directory was previously at the top of the list (see Exercise 65, step 6, page 167). The *hidden system files* took GAME directory's location and bumped GAMES to the next available spot. It is possible that your directories are *not* in this exact order.

Exercise 74 continued...

⓫ Delete EDITOR and LSNSIX in the MISC directory:

These files must be deleted before you do Lesson Eight, DOS Shell.

- **Type** `CD MISC` ↵

```
A:\MISC>
```

- **Type** `DIR` ↵

*DOS lists the files in the **root** directory.*

```
 Directory of A:\MISC

.            <DIR>      09-07-93   7:42p
..           <DIR>      09-07-93   7:42p
HELLO                99 05-25-93   9:36p
HURRAH               54 05-02-93   8:40p
NOT                  60 05-25-93   9:37p
EDITOR              591 XX-XX-XX   X:XXX
LSNSIX              404 09-14-93   X:XXX
       7 file(s)          1208 bytes
                        XXXXX bytes free
```

- **Type** `DEL EDITOR` ↵
- **Type** `DEL LSNSIX` ↵
- **Type** `DIR` ↵

```
 Directory of A:\MISC

.            <DIR>      09-07-93   7:42p
..           <DIR>      09-07-93   7:42p
HELLO                99 05-25-93   9:36p
HURRAH               54 05-02-93   8:40p
NOT                  60 05-25-93   9:37p
       7 file(s)            213 bytes
                        XXXXX bytes free
```

- **Change** to the *root* directory.

```
A:\>
```

⓬
- **Take** the Duplicate Learning Disk out of drive A:.
- **Turn** the computer off. (Do not continue on to Exercise 75 without restarting the computer.)

*NOTE: Since you have deleted COMMAND.COM, your disk is no longer a system disk. If you continue without COMMAND.COM, at some point DOS will ask you to **"Insert a disk with COMMAND.COM in drive A — Press any key to continue . . . ."** When you get such a message, you will have to reboot the computer because you will not have a floppy disk with COMMAND.COM on it. (When DOS needs COMMAND.COM, it looks for it on the **boot** (system) disk.)*

EXERCISE 75

Practice

LESSON SEVEN
Automating DOS

OBJECTIVE:

- review the following tasks from the exercises in Lesson Seven:

Create a simple batch file
PATH
ECHO
PAUSE
Create a batch file that uses data files
Create a batch file that backs up files
Delete batch files
Create AUTO.BAT
SYS

The COMMANDS to perform each step are listed in Appendix I. Try to complete the exercise without looking at the Appendix for help.

1. **Turn** the computer on, **access** the DUPLICATE Learning Disk on drive A: and **change** to this common DOS prompt: `A:\>`, if necessary.

2. **Create** a batch file in the *root* directory that changes to the PROGRAMS directory and runs the DB.EXE program file, and then changes back to the *root* directory. Name the batch file DATA.BAT.

3. **Run** the new batch file and exit the program.

```
                    * * * Database Program * * *

If this was a real database program

you would use it to:

   * Create a record structure for a database file.
   * Add data into the records.
   * Find and modify database records.
   * Query the database -- ask it to show specific records.
   * Create and print reports that summarize the records.

Press <Enter> to exit this program ?
```

4. **Display** the current path.

   DOS lists the current path.

5. **Clear** the current path.

6. **Display** the current path.

```
No path
```

7. **Set** this path in the computer's memory:
   C:\DOS;C:\MOUSE;A:\PROGRAMS

8. **Display** the current path.

```
PATH=C:\DOS;C:\MOUSE;A:\PROGRAMS
```

9. **Run** SS.EXE from the *root* directory and exit it.

   DOS displays the "mock" spreadsheet program and prompts you to press [↵] to exit.

10. **Display** the current status of ECHO.

```
ECHO is on
```

11. **Turn** ECHO off.

    The prompt disappears, and only the cursor shows.

```
_
```

12. **Display** the current status of ECHO.

```
ECHO is off
```

13. **Echo** this message: Where did the prompt go?

```
Where did the prompt go?
```

14. **Turn** ECHO back on.

```
A:\>
```

Exercise 75 continued...

15 **Create** the following *data file* for a *batch file*; name it FUN.DAT:

```
**************************
           FUN
**************************
I am having a good time
creating batch files.
```

16 **Create** the following batch file; name it FUN.BAT:

```
@ECHO OFF
CLS
TYPE FUN.DAT
PAUSE
CLS
```

17 **Run** the FUN.BAT batch file.

```
**************************
           FUN
**************************
I am having a good time
creating batch files.

Press any key to continue . . .
```

18 **Create** a batch file that will back up the files in the MEMOS directory to the TEMP directory, and then list the TEMP directory. Name the batch file BAKUP.BAT.

19 **Run** the BAKUP.BAT batch file.

```
A:\PROGRAMS\DATA\MEMOS\SMITH.MEM
A:\PROGRAMS\DATA\MEMOS\LOPEZ.MEM
A:\PROGRAMS\DATA\MEMOS\JONES.MEM
A:\PROGRAMS\DATA\MEMOS\MEMO3
A:\PROGRAMS\DATA\MEMOS\MEMO1
A:\PROGRAMS\DATA\MEMOS\MEMO2
        6 file(s) copied
 Volume in drive A is LEARNING
 Volume Serial Number is 1ADC-226A
 Directory of A:\TEMP
.            <DIR>      09-07-93   7:51p
..           <DIR>      09-07-93   7:51p
SMITH    MEM            9 05-02-93   8:20p
LOPEZ    MEM            9 05-02-93   8:21p
JONES    MEM            9 05-02-93   8:22p
MEMO3                   5 05-02-93   8:21p
MEMO1                   5 05-02-93   8:24p
MEMO2                   5 05-02-93   8:24p
        8 file(s)          42 bytes
                       XXXXXX bytes free
Press any key to continue . . .
```

20 **Create** the following batch file; name it AUTO.BAT.

```
@ECHO OFF
CLS
PROMPT $P$G
PATH C:\DOS;C:\MOUSE;A:\PROGRAMS
WP
CLS
```

21 **Run** the AUTO.BAT file, and exit the word processing program.
DOS displays the WP.EXE program; you press ↵ *; DOS displays the DOS prompt.*

22 **Create** a *system disk* out of the Duplicate Learning Disk.

23 **Boot** the computer with the Duplicate Learning Disk in drive A:.
Press ↵ at the date and time prompts; do not change the date or time.
DOS 6 users **Type** `PROMPT` ↵

24 **Type** `REN A:\AUTO.BAT AUTOEXEC.BAT` ↵
(To rename AUTO.BAT to AUTOEXEC.BAT.)

Exercise 75 continued...

Use this directory structure to help you know where you are working within the directory structure.

```
A:.
├─FOOD
│  ├─VEGGIES
│  └─GOODIES
├─PROGRAMS
│  └─DATA
│     ├─SS
│     ├─DB
│     ├─WP
│     ├─LETTERS
│     ├─MEMOS
│     └─REPORTS
├─TEMP
├─GAMES
└─MISC
```

25 **Boot** the computer with the Duplicate Learning Disk in drive A:.

*DOS executes the batch file and runs the WP.EXE program. After you exit the program, DOS displays the **common** DOS prompt.*

```
A:\>
```

26 **List** the contents of the *root* directory.

```
 Directory of A:\

FOOD           <DIR>      05-02-93   7:46p
PROGRAMS       <DIR>      05-22-93   8:41p
TEMP           <DIR>      09-07-93   7:51p
GAMES          <DIR>      05-02-93   7:46p
MISC           <DIR>      09-07-93   7:42p
DATA       BAT         22 09-22-93   X:XXX
FUN        DAT        118 09-22-93   X:XXX
FUN        BAT         44 09-22-93   X:XXX
BAKUP      BAT        129 09-22-93   X:XXX
AUTOEXEC   BAT         72 09-20-93   X:XXX
COMMAND    COM      47845 04-09-91   X:XXX
       11 file(s)         48230 bytes
                          XXXXX bytes free
```

NOTE: Your file sizes and their order may be slightly different.

27 **Type** `DEL A:\COMMAND.COM` ↵
IF "Access denied" appears,
Type `ATTRIB -R A:\COMMAND.COM` ↵ and repeat this step.

28 **Type** `DEL A:\*.*` ↵ (to delete all the files in the root directory).

DOS warns you that "all files in directory will be deleted," and asks if you are sure.

Type Y ↵

29 **List** the contents of the *root* directory.

```
 Directory of A:\

FOOD           <DIR>      05-02-93   7:46p
PROGRAMS       <DIR>      05-22-93   8:41p
TEMP           <DIR>      09-07-93   7:51p
GAMES          <DIR>      05-02-93   7:46p
MISC           <DIR>      09-07-93   7:42p
       5 file(s)              0 bytes
                          XXXXXX bytes free
```

30 **Change** to the TEMP directory.

```
A:\TEMP>
```

31 **List** the files in the TEMP directory.

```
 Directory of A:\TEMP

.              <DIR>      09-07-93   7:51p
..             <DIR>      09-07-93   7:51p
SMITH      MEM          9 05-02-93   8:20p
LOPEZ      MEM          9 05-02-93   8:21p
JONES      MEM          9 05-02-93   8:22p
MEMO3                   5 05-02-93   8:21p
MEMO1                   5 05-02-93   8:24p
MEMO2                   5 05-02-93   8:24p
       8 file(s)             42 bytes
                          65536 bytes free
```

32 **Delete** all the files in the TEMP directory.

33 **List** the files in the TEMP directory.

```
 Directory of A:\TEMP

.              <DIR>      09-07-93   7:51p
..             <DIR>      09-07-93   7:51p
       2 file(s)              0 bytes
                          XXXXX bytes free
```

34 **Change** to the *root* directory.

```
A:\>
```

35 **Go on** to Worksheet 25.
If desired, **take** the disk out of drive A: and turn the computer off.

WORKSHEET 25

NAME _____

TOPIC 14 and EXERCISE 66

DIRECTIONS: Use the following terms to fill in the blanks below.

PATH	executable files	AUTOEXEC.BAT
.DAT file	search path	Automating DOS
batch file	CONFIG.SYS	

1. Files that do a task (programs, external DOS commands, or batch files). *They* end with .EXE, .COM, or .BAT. 1. _____

2. An important *batch-like* file that is executed when the computer system starts, and that contains commands that manage the computer's hardware, especially memory. 2. _____

3. A list of directories set by the PATH command that DOS looks through to find an *executable* file. 3. _____

4. A *text file* that is made up of a group of *DOS commands* that are executed one after the other when you *run* the file. 4. _____

5. Sets a search path in the computer's memory. 5. _____

6. A *text file* that commonly contains information that is displayed in a *batch file*. 6. _____

7. An important batch file that DOS looks for and executes when you turn the computer on, and that contains commands that set up your work environment the way you want it. 7. _____

8. Using *batch files* to execute groups of commands, especially AUTOEXEC.BAT. 8. _____

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WORKSHEET 26

NAME _____

EXERCISES 67, 68, 72, 73, and 74

DIRECTIONS: Use the following terms to fill in the blanks below.

SYS	warm boot	COMMAND.COM	Terminate a batch file
ECHO	system disk	AUTOEXEC.BAT	
PAUSE	REM (remark)	hidden system files	

1. Copies DOS *system* files and COMMAND.COM to a disk you specify, making the disk a *system* (bootable) disk. 1. _____

2. Temporarily stops a batch file and prompts the user to press any key to continue. 2. _____

3. End a batch file before all the commands in it are executed. 3. _____

4. The process of *restarting* the computer by simultaneously pressing Ctrl, Alt, and Del instead of using the on/off switch. 4. _____

5. Used mainly in *batch files* to turn the *command echoing* feature on or off, or display a message. 5. _____

6. A disk that contains the *system* files needed to start up or *boot* the computer. 6. _____

7. An important batch file that DOS looks for and executes when you turn the computer on. 7. _____

8. Two *system files* that DOS puts on a *system disk* (IO.SYS and MSDOS.SYS) when you use the SYS command. You cannot see or access them, but they are there and they take up space. 8. _____

9. A *batch file* command that lets you add a comment to a batch file without affecting the way the batch file runs. 9. _____

10. The *system file* that contains DOS's *internal commands* and that DOS puts on a *system disk* when you use the SYS command. 10. _____

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WORKSHEET 27

NAME _____

LESSON SEVEN, Questions and Commands

1. What is the important batch file that DOS executes when the computer starts and that lets you set up the computer system the way you want it? 1. _____

2. What is the important batch-like file that DOS executes when the computer starts and that has commands that manage the computer's hardware, especially memory? 2. _____

3. What are the two ways that DOS can carry out commands? 3. 1)_____

   2)_____

4. What program do you use to create and edit batch files? 4. _____

5. What command sets a *search path* in the computer's memory? 5. _____

6. List the three *filename extensions* that can be used at the end of *executable files*. 6. _____

7. What kind of file do you use to *automate* DOS? 7. _____

8. What character separates different *paths* in a PATH statement? 8. _____

9. What command starts a batch file with a clear screen? 9. _____

10. What command temporarily stops a batch file so you can read a message? 10. _____

11. What command suppresses the *screen display* of batch file commands? 11. _____

12. What command lets you add a comment to a batch file without affecting the way it is executed? 12. _____

13. What keys are used simultaneously to *warm boot* (restart) the computer? 13. _____

14. What is the *system file* that contains DOS's *internal commands*? 14. _____

15. Where does DOS put the *hidden system files*? 15. _____

16. Why is it a good idea to have a floppy *system disk* with AUTOEXEC.BAT and CONFIG.SYS on it? 16. _____

17. This book instructs you to put **A:** in front of AUTOEXEC.BAT and CONFIG.SYS when you deleted them so you would not accidentally delete them on what disk? 17. _____

18. What command *terminates* a batch file? 18. _____

WHAT IS THE COMMAND TO:

19. Set these paths in the computer's memory: C:\DOS, C:\MOUSE, and A:\GAMES. 19. _____

20. Create a *system disk* on the disk in drive A:. 20. _____

21. Turn the *command echoing* feature off. 21. _____

22. Set the *common* DOS prompt. 22. _____

23. Put this remark in a batch file: Be happy. 23. _____

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Lesson Eight
DOS Shell

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TOPIC 15
DOS Shell

A program that lets you work with files, organize and start programs, and switch between programs.

OBJECTIVES:

- identify *graphical user interface*
- identify what DOS Shell does
- identify the changeable elements in DOS Shell's environment
- examine the opening DOS Shell screen
- identify the DOS Shell screen elements: *bars* and *areas*

– Terms and Notes –

Skip Lesson Eight?
If you already use a program that performs **file managing** functions similar to those in DOS Shell, you may not want to take the time to learn DOS Shell too.

On the other hand, if you are not familiar with a file managing program, DOS Shell is a simple program that will introduce you to a Windows-like environment.

What is DOS Shell?

DOS Shell is a program that provides a graphics environment that connects you to DOS in a natural way, while also offering you more powerful ways to communicate with DOS.

DOS Shell is called a **graphical user interface**, which simply means that DOS Shell has *pictures* that *you use* to *communicate* with DOS.
(graphical) (user) (interface)

What does DOS Shell do?

DOS Shell lets you:

- perform many of the same DOS functions that you perform from the *DOS prompt*,
- choose commands from a menu,
- change drives by choosing an icon,
- change directories from the *Directory Tree area*,
- select files from a list,
- organize and start programs, and
- run more than one program at a time and switch between them.

DOS Shell has a changeable environment

DOS Shell has a characteristic that is sometimes referred to as *sticky settings*, which means that when you *make changes* (for example, in the *options* or *view* menus) they are remembered when you exit and then restart DOS Shell.

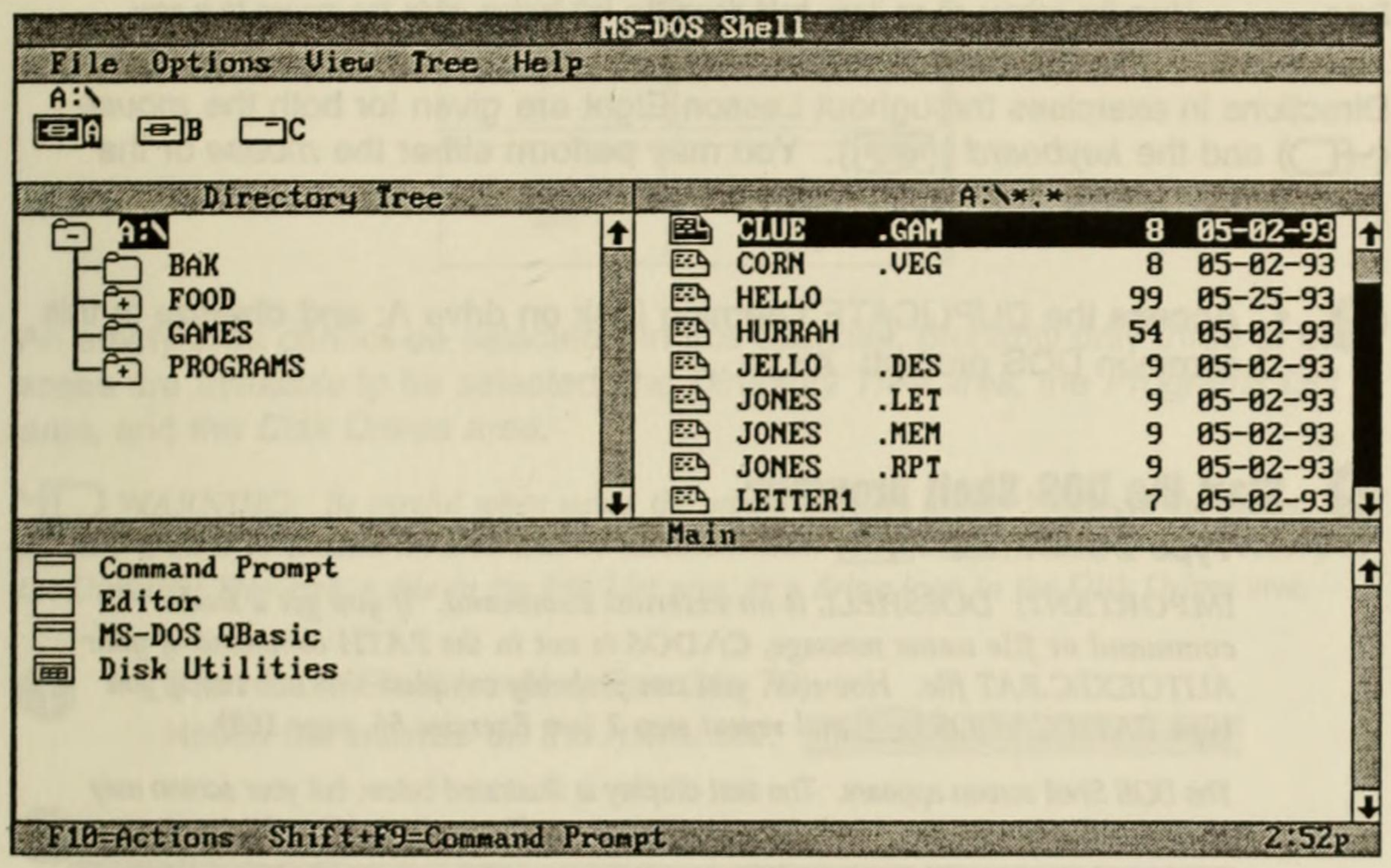
DOS Shell has:

- up to eight ***Color Scheme options***
  - Basic Blue
  - Ocean
  - Monochrome—2 colors
  - Monochrome—4 colors
  - Reverse
  - Hot Pink
  - Emerald City
  - Turquoise
- two ***display*** modes
  - text
  - graphic
- two ***ways*** to perform actions
  - keyboard
  - mouse
- up to five different ***areas*** to work in
  - Disk Drives area
  - Directory Tree area
  - File List area
  - Program List area
  - Active Task List area
- five ways to ***view*** the ***areas*** listed above
  - Single File List
  - Dual File Lists
  - All Files
  - Program/File Lists (default)
  - Program List

Topic 15 continued...

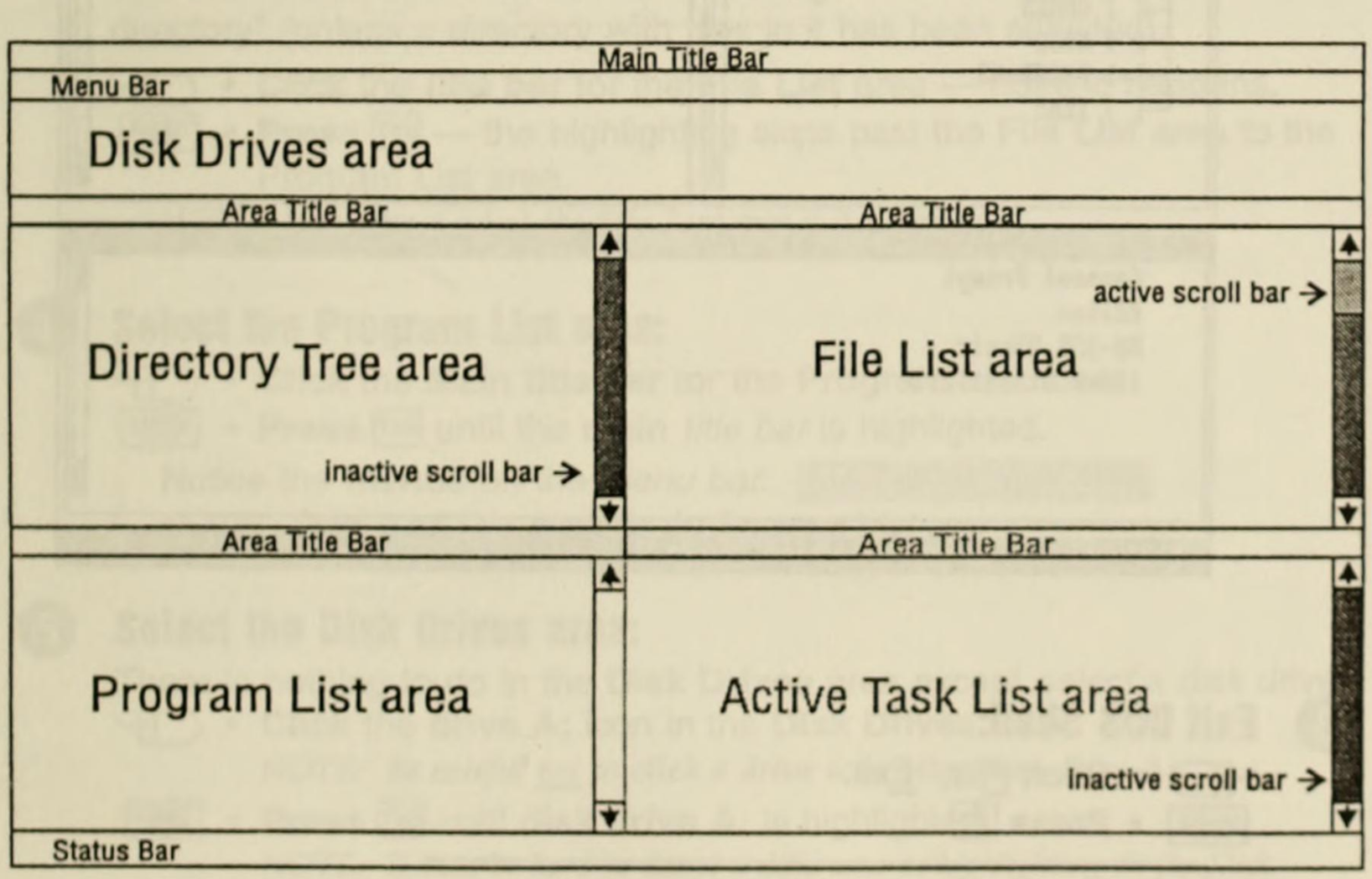
DOS Shell screen in graphics mode (your screen may be different)

Unless someone has changed it, the opening DOS Shell screen uses ***text display*** and ***ocean color.*** The illustration below shows the contents of the *original Learning Disk* in DOS Shell using the *graphics display mode.* The next page illustrates the contents of the *current Duplicate Learning Disk* in DOS Shell using the *text display mode.*



DOS Shell screen elements

The DOS Shell screen has two kinds of elements, **bars** and **areas**.



↑

The light gray represents the optional "Active Task List" ***area*** *that may or may not be displayed on your screen. The Active Task List is turned on and off from the Options menu.*

text display
The display mode in which information on the screen is displayed without using *graphics*. For example, a disk drive is represented as [A:] instead of A. All monitors support *text* display, while some monitors do not support *graphics* display.

graphics display
The display mode in which many elements are displayed graphically. An element that is represented graphically is called an *icon*. Not all monitors support *graphics* display.

icon
A small picture that represents an element such as a disk drive, directory, or file. Although icons are technically *graphic images*, in this book, some items in the *text* mode may be referred to as an icon (such as [A:] instead of A to depict a disk drive).

bars
Narrow strips in DOS Shell that perform various functions, such as displaying the title of an area, displaying status of DOS Shell, holding menus, and scrolling lists.
The five kinds of bars in DOS Shell are:
1. **main title bar**, MS-DOS Shell
2. **menu bar**
   (may change depending on *selected* area)
3. **status bar**
4. three or four **area title bars**
5. three or four **scroll bars**
   (scroll bars are only active when the **area's** contents are not completely visible)

areas
Parts of the DOS Shell screen that display different DOS information. The five possible areas are:
1. **Disk Drives** area
   (has no title bar)
2. **Directory Tree** area
   (title bar name is always Directory Tree)
3. **File List** area
   (title bar displays the path to the files)
4. **Program List** area
   (title bar displays the current *group* name)
5. **Active Task List** area
   (this *area* is turned on and off from the *Options* menu and may or may not be displayed)

NOTE: Every **area** *except* the **Disk Drives area** has a *title bar* and a *scroll bar.*

EXERCISE 76

Start DOS Shell

Issue the command to start the DOS Shell program, DOSSHELL.

OBJECTIVES:
- identify different mouse actions
- start the DOS Shell program
- exit the DOS Shell program

- Terms and Notes -

DOSSHELL
The DOS command that starts the DOS Shell program.

NOTE: The mouse may not work in DOS Shell if another program in your computer system has its own special instructions to use the mouse (for example, Windows). If the mouse does not work, you can try typing MOUSE at the DOS prompt and then start DOS Shell again. If the mouse still does not work, get advice from a computer expert or use the keyboard to perform actions in DOS Shell.

NOTE: DOS Shell defaults to using the *text display mode* (a disk drive is shown as [A:]). Someone may have changed DOS Shell to the *graphic display mode* (a disk drive is an icon,). To change to the *text mode* so your results will match those in the book:
- **Type** Alt, O (options menu)
- **Type** D (display command)
- **Press** ↑ until **Text 25 lines Low Resolution** is highlighted.
- **Press** ↵

STEPS to

Start DOS Shell
- **Type** DOSSHELL ↵

Exit DOS Shell
- **Click** File, Exit

STEPS to

Start DOS Shell
- **Type** DOSSHELL ↵

Exit DOS Shell
- **Press** F3

Different ways to perform actions in DOS Shell

There are two ways to perform actions in DOS Shell; you can use the **keyboard** or the **mouse**. To use the *mouse* you should be familiar with these three *mouse* actions:

Click	Move the pointer on an item and quickly press and release the left mouse button.
Double-click	Move the pointer on an item and quickly press and release the left mouse button *twice*.
Drag	Move the pointer on an item, hold down the left button, slide the mouse to a new location, and release the button.

Directions in exercises throughout Lesson Eight are given for both the *mouse* ( ) and the *keyboard* ( ). You may perform either the *mouse* or the *keyboard* directions, but not both at the same time.

1
- **Access** the DUPLICATE Learning Disk on drive A: and **change** to this common DOS prompt: `A:\>`

2 Start the DOS Shell program:

- **Type** DOSSHELL ↵

*IMPORTANT: DOSSHELL is an **external command**. If you get a **Bad command or file name** message, **C:\DOS** is not in the PATH command of your AUTOEXEC.BAT file. However, you can probably complete this exercise if you type PATH C:\DOS ↵ and repeat step 2 (see Exercise 66, page 168).*

*The DOS Shell screen appears. The **text display** is illustrated below, but your screen may be different.*

```
                              MS-DOS Shell
 File  Options  View  Tree  Help
 A:\
[A:]  [B:]  [C:]

 Directory Tree                          A:\*.*
[-] A:\                                  No files in selected directory.
  ├─[+] FOOD
  ├─[ ] GAMES
  ├─[ ] MISC
  ├─[+] PROGRAMS
  └─[ ] TEMP

 Main
   Command Prompt
   Editor
   MS-DOS QBasic
   [Disk Utilities]

F10=Actions  Shift+F9=Command Prompt                          8:45p
```

3 Exit DOS Shell:

- **Click** File, Exit.
- **Press** F3

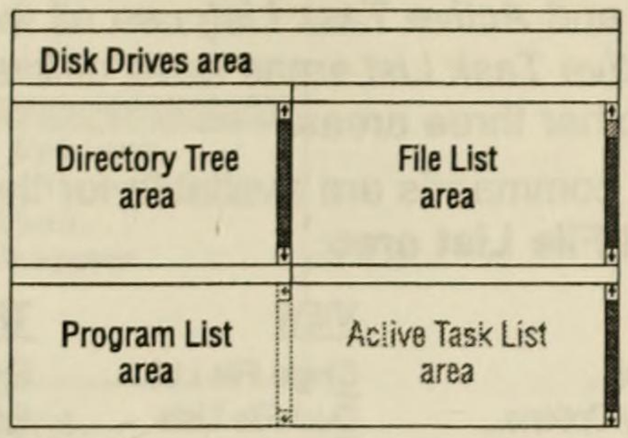
```
A:\>
```

4
- **Go on** to Exercise 77.

Continue from Exercise 76

Selecting areas

You need to select an area in the DOS Shell window before you can work in it. The five different areas and their locations are displayed below:



An empty area cannot be selected. In this exercise, probably only three of the **areas** are *available* to be selected, the *Directory Tree area*, the *Programs List area*, and the *Disk Drives area.*

WARNING: Be careful when using the mouse to select areas. Whatever the ***mouse pointer*** *is close to* ***within*** *an area will be* ***selected*** *when you click, for example: a* ***directory*** *in the Directory Tree area, a* ***file*** *in the File List area, or a* ***drive icon*** *in the Disk Drives area.*

1 • **Start** DOS Shell (review, Exercise 76).
Notice the **menus** on the *menu bar:* File Options View Tree Help

2 Select the Directory Tree area:

- **Click** the **title bar** for the **Directory Tree** area.
- **Press** Tab until the **Directory Tree** *title bar* is highlighted.

Notice the **menus** on the *menu bar:* File Options View Tree Help

3 Try to select the File List area:

The **File List** area will contain the message "No files in selected directory" (unless a directory with files in it has been selected).

- **Click** the **title bar** for the **File List** area — nothing happens.
- **Press** Tab — the highlighting skips past the **File List** area to the Program List area.

NOTE: You cannot select the ***File List*** *area if it is empty.*

4 Select the Program List area:

- **Click** the **Main title bar** for the **Program List** area.
- **Press** Tab until the **main** *title bar* is highlighted.

Notice the **menus** on the *menu bar:* File Options View Help
NOTE: There is no Tree menu for the ***Program List*** *area.*

5 Select the Disk Drives area:

There is nothing to do in the **Disk Drives** area except *select* a disk drive.

- **Click** the **drive A:** icon in the **Disk Drives** area.
  NOTE: Be careful not to click a drive icon other than drive A:.
- **Press** Tab until **disk drive A:** is highlighted.
  NOTE: It may be hard to detect a difference in highlighting in the Disk Drives area since the "selected" drive is already highlighted (in a different color).

Notice the **menus** on the *menu bar:* File Options View Tree Help

6 • **Go on** to Exercise 78.

EXERCISE 77

Select areas

Move to different areas in the DOS Shell screen.

OBJECTIVES:

- identify the five areas in DOS Shell
- select the Directory Tree area
- try to select the File List area
- select the Program List area
- select the Disk Drives area

- Terms and Notes -

select
To pick an area or mark an item so that a subsequent action can have an effect on the area or item.

highlight
To select an item or text, causing it to be displayed in a different color or in reverse video (the foreground and background colors are opposite the normal screen colors).

mouse pointer
A small rectangle (▒) (in the *text* screen) or an arrow icon (↖) (in the *graphics* screen) that moves with the mouse as you slide the mouse over a flat area.

STEPS to

Select areas

- **Click** the desired area title bar, or the desired drive icon in the Disk Drives area.

STEPS to

Select areas

- **Press** Tab to move forward through the available areas.
  OR
  Press Shift + Tab to move backwards through the available areas.

EXERCISE 78

Use the menu bar

To select and cancel a menu on the menu bar, and to choose a command from a menu.

OBJECTIVES:

- identify the menus that are available for the five different areas
- activate and cancel the menu bar (keyboard users only)
- select and cancel a menu
- choose a command that activates a command directly
- choose a command that opens a dialog box

– Terms and Notes –

NOTE: When the DOS Shell *text mode* is used and the menu bar is active, the characters which activate menus and their commands are *highlighted*; but when the *graphics mode* is used, those characters are *underlined.*

STEPS to

Select a command

1 **Click** the menu you want.
The menu drops down.
2 **Click** the command you want.

STEPS to

Activate/cancel the menu bar

- **Press** Alt

Select a command

1 **Activate** the menu bar (above).
2 **Type** the highlighted (or underlined) letter on the menu you want.
The menu drops down.
3 **Type** the highlighted (or underlined) letter of the command you want.

Continue from Exercise 77

Using the menu bar in DOS Shell

There are five menus in DOS Shell: File, Options, View, Tree, and Help. Three **areas** (*Disk Drives*, *Directory Tree*, and *File List*) use all five menus. Two **areas** (*Program List* and *Active Task List*) use all the menus except Tree. The *Program List* and *Active Task List* areas have *different* options available in their File menu than the other three areas.

The following menus and commands are available for the **Disk Drives area**, **Directory Tree area**, and **File List area**:

FILE	OPTIONS	VIEW	TREE	HELP
Open	Confirmation...	Single File List	Expand One Level	Index
Run...	File Display Options...	Dual File Lists	Expand Branch	Keyboard
Print	Select Across Directories	All Files	Expand All	Shell Basics
Associate...	Show Information...	Program/File Lists	Collapse Branch	Commands
Search...	Enable Task Swapper	Program List		Procedures
View File Contents	Display...	Repaint Screen		Using Help
Move...	Colors...	Refresh		About Shell
Copy...				
Delete...				
Rename...				
Change Attributes...				
Create Directory...				
Select All				
Deselect All				
Exit				

The following menus and commands are available for the **Program List area** and **Active Task List area**:

FILE	OPTIONS	VIEW	HELP
New...	Confirmation...	Single File List	Index
Open	File Display Options...	Dual File Lists	Keyboard
Copy	Select Across Directories	All Files	Shell Basics
Delete...	Show Information...	Program/File Lists	Commands
Properties...	Enable Task Swapper	Program List	Procedures
Reorder	Display...	Repaint Screen	Using Help
Run...	Colors...	Refresh	About Shell
Exit			

❶ Activate and cancel the menu bar (keyboard only):

- **Press** Alt

The menu bar becomes active.

File Options View Tree Help

- **Press** Alt again.

The menu bar is canceled.

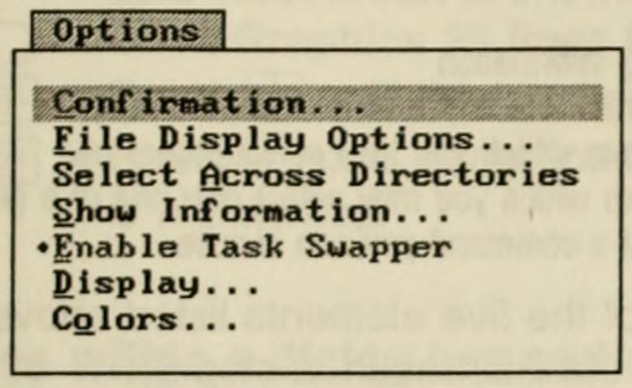
File Options View Tree Help

Exercise 78 continued...

❷ Select and cancel a menu:

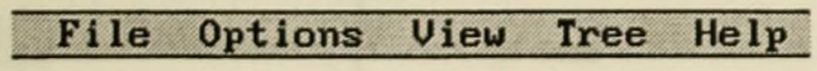
- **Click** Options (on the menu bar).
- **Press** Alt, then O

The Options menu drops down.



- **Click** Options.
- **Press** Alt, Alt

The menu bar is canceled.



❸ Choose a command that performs a task directly:

(as compared to a command that opens a dialog box, which is covered in the next exercise).

- **Click** View, Single File List.
- **Press** Alt, V (View), S (Single File List).

*DOS Shell displays only three **areas** (Disk Drives, Directory Tree, and File List).*

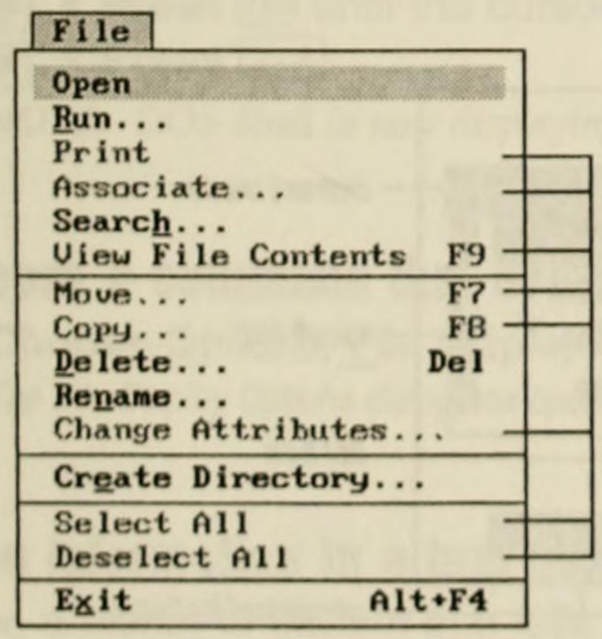
- **Click** View, Program/File Lists.
- **Press** Alt, V (View), F (Program/File List).

*DOS Shell displays four (or five) **areas**.*

❹ Examine dimmed commands on a menu:

- **Select** the Directory Tree area (review, Exercise 77).
- **Click** File.
- **Press** Alt, F (File).

The File menu drops down.



Dimmed commands cannot be used in the current situation.

❺

- **Click** File.
- **Press** Alt, Alt

The menu bar is canceled.

❻

- **Exit** DOS Shell (review, Exercise 76).

❼

- **Go on** to Exercise 79
  or **take** the disk out of drive A: and turn the computer off.

Exercise 78 (continued)
Use the menu bar

choose
To pick a command that initiates an action (often on a selected item). (Contrast with *select*, which means to *mark* an item so that a subsequent action can have an effect on it.)

dimmed command
A menu command that is shown in gray instead of black and cannot be used in the current situation.

shortcut keys
Easy-to-use key combinations that activate certain commands instead of using menus. If a menu option has a *shortcut*, the key combination is shown to the right of the command on the drop-down menu.

Listed below are commands from the menus which have shortcut keys:

command	shortcut key	menu
View File Contents	F9	File
Move...	F7	File
Copy...	F8	File
Delete...	Del	File
Exit	Alt + F4	File
Repaint Screen	Shift + F5	View
Refresh	F5	View
Expand One Level	+	Tree
Expand Branch	*	Tree
Expand All	Ctrl + *	Tree
Collapse Branch	−	Tree

EXERCISE 79

Use dialog boxes

Use various methods to specify information in a dialog box.

OBJECTIVES:

- identify five ways a dialog box asks for additional information
- choose a command that opens a dialog box
- cancel a dialog box
- scroll a list and select an item
- move in a dialog box and choose a command button
- complete the original command
- type information in a text box
- move to a check box and select an item
- move to a group of option buttons and select one option
- get help in a dialog box
- cancel Help

– Terms and Notes –

dialog box
A box that appears when a *menu command* with an ellipsis (...) is chosen. A dialog box requests additional information before completing the original command.

text box
A box in a dialog box that provides space to type the information needed to carry out a command.

list box
A box in a dialog box that provides a list of options from which one item may be selected.

check boxes
Squares next to items in a dialog box from which you may select as many items as you want.

option buttons
Circles next to items in a dialog box from which you may select *only one item of a related group.*

command buttons
Small boxes that hold an icon or a word that will carry out a command when chosen.

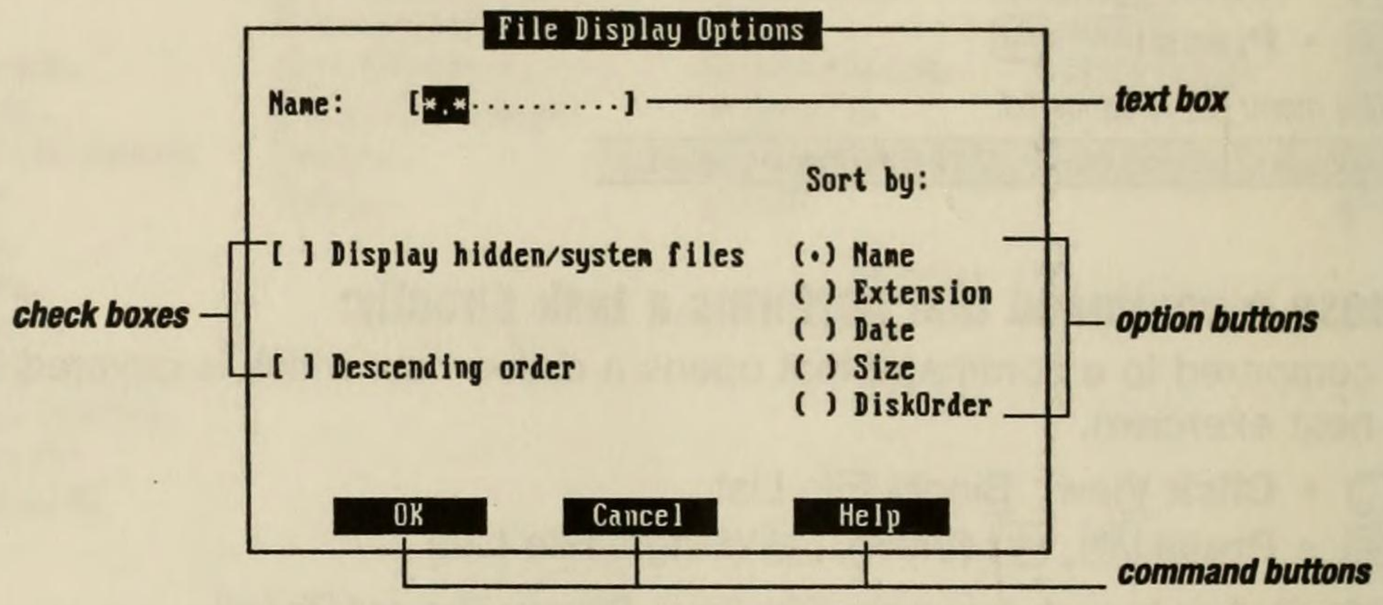
deselect
To *unmark* an item so that a future action will *not* activate the item.

Using dialog boxes in DOS Shell

A dialog box is opened whenever a menu command which is followed by an ellipsis (...) is chosen. Dialog boxes use *five* methods to request additional information before you complete the original command.

Dialog boxes use	that
text boxes	provide space for typing information
list boxes	display a list of items from which you may select one item
check boxes	are squares by items from which you may select any or all
option buttons	are circles by items from which you may select only one of a group
command buttons	are rectangles that hold a command you can choose

Below is a dialog box that contains four of the five elements listed above (a dialog box with a **list box** is shown in the illustration in step 3):



1 • If necessary, **access** the DUPLICATE Learning Disk on drive A: and **change** to this common DOS prompt: `A:\>`

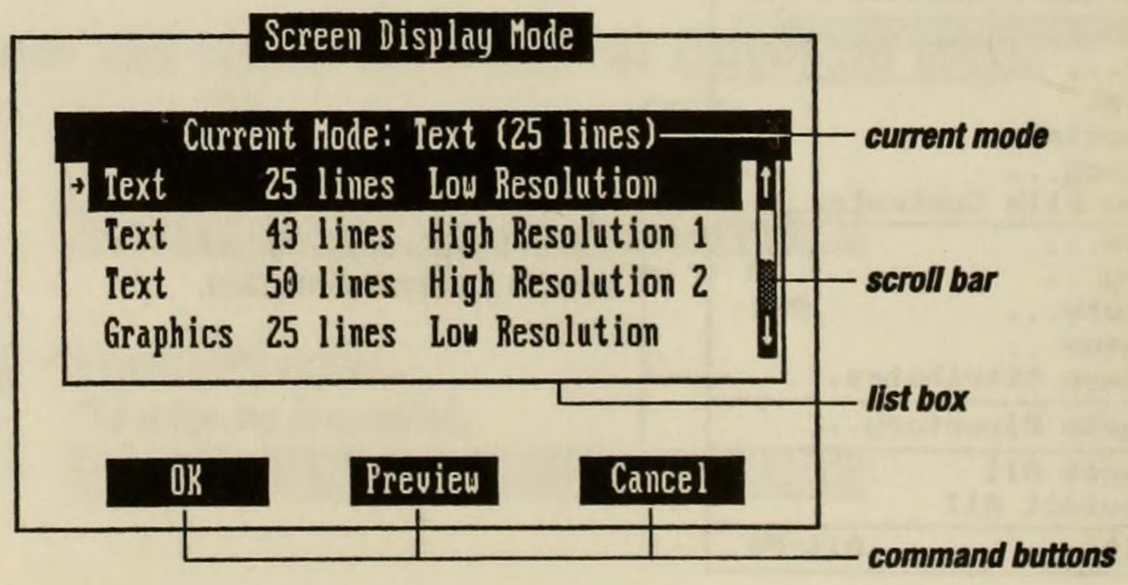
2 • **Start** DOS Shell (review, Exercise 76).

3 **Choose a command that opens a dialog box:**

• **Click** Options, Display....

• **Press** Alt, O (Options), D (Display...).

The Screen Display Mode dialog box opens.



4 **Cancel a dialog box:**

• **Click Cancel.**

• **Press** Esc

5 • **Choose** Options, Display... again (review, step 3).

*IMPORTANT: From this point on, you will usually be given **general** instructions to **choose commands** (neither mouse nor keyboard) the way it is shown in this step, that is, with the menu listed first and the command listed second, and with the "activating letter" in bold and underlined.*

Exercise 79 continued...

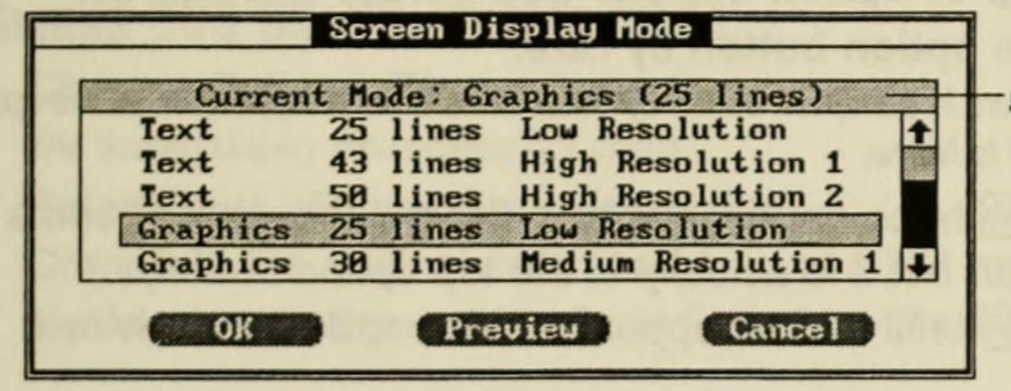
❻ Scroll a list and select an item:

- **Click** the **down arrow** in the scroll bar until the last item in the list is displayed.
- **Click** the **up arrow** in the scroll bar until **Graphics 25 lines Low Resolution** is showing.
- **Click Graphics 25 lines Low Resolution**.
- **Press** ↓ until the last item in the list is *highlighted.*
- **Press** ↑ until **Graphics 25 lines Low Resolution** is *highlighted.*

❼ Move within a dialog box and choose a command button:

- **Click** the **Preview** *command button.*
- **Press** Tab until the cursor moves to the **Preview** *command button.*
- **Press** ↵

The DOS Shell screen now ***displays*** *information in* ***graphics mode****; however, realize that what you see is only a "preview," not a completed change.*



❽ Complete the original command:

(Completing the Options Display command will *change* the DOS Shell **display** from *text mode* to *graphics mode.*)

NOTE: If your monitor does not support the ***graphics mode****, stay in the* ***text mode****. The illustrations in the book will be slightly different than your monitor's display.*

- **Click** the **OK** *command button.*
- **Press** Tab until the cursor moves to the **OK** *command button.*
- **Press** ↵

NOTE: DOS Shell is now displaying ***graphics mode*** *on the screen.*

❾ Choose a command that opens a dialog box:

- **Choose** Options, File Display Options....

  The File Display Options dialog box opens with the cursor in the ***text box****.*

❿ Type information in a text box:

(type a *filename pattern* that tells DOS to display files that end with .DES)

- **Type** * . DES

  NOTE: In this particular dialog box, the ***text box*** *is the* ***selected area*** *by default — in other cases, you may have to* ***move*** *to the text box you want before you can type the information in it.*

  NOTE: Information in a text box that is automatically highlighted disappears when you begin typing. If you want, you can move the cursor to a spot in the text that is already there and make changes from that point without losing what is there.

Exercise 79 continued...

STEPS to

Open a dialog box

1 **Click** a menu on the menu bar.
2 **Click** a command with an ellipsis (...).

Cancel a dialog box
(and any changes you made in it)

- **Click** the **Cancel** command button.

Move within a dialog box

- **Click** the item you want.

Type information in a text box

1 **Click** the text box you want.
2 **Type** the information you want.

Select an item in a list box

1 **Click** the *scroll bar arrows* until the item you want appears.
2 **Click** the item you want.

Select/deselect a check box

- **Click** the check box by the item you want to select or deselect.

  NOTE: The item is selected when an X is present, and deselected when the box is empty.

Select an option button

- **Click** the option button by the one item you want in the group of options.

Choose a command button

- **Click** the desired command button.

Complete original command

- **Click** the **OK** command button.

STEPS to

Keyboard steps are on the next page.

STEPS to

Open a dialog box
1 **Press** Alt
2 **Type** the highlighted (or underlined) letter of the menu name you want.
3 **Type** the highlighted (or underlined) letter of the command (with an ellipsis (...)) you want.

Cancel a dialog box
(and any changes you made in it)
- **Press** Esc

Move within a dialog box
- **Press** Tab to move forward,
  or
- **Press** Shift + Tab to move backwards.

Type information in a text box
1 **Press** Tab until you move to the text box you want.
2 **Type** the information you want.

Select an item in a list box
1 **Press** Tab until you move to the list box.
2 **Press** ↓ or ↑ until the item you want is highlighted.

Select/deselect a check box
1 **Press** Tab until the cursor moves to the check box by the item you want.
2 **Press** Space to select or deselect item.
NOTE: The item is selected when an X is present, and deselected when the box is empty.

Select an option button
1 **Press** Tab until the cursor is in the option buttons area (the cursor moves to the item already selected and seems to disappear if the graphics mode is used).
2 **Press** ↓ or ↑ until the dot moves to the item you want.

Choose a command button
1 **Press** Tab until the cursor moves to the command button you want.
2 **Press** ↵

Complete original command
1 **Press** Tab until the cursor moves to the **OK** command button.
2 **Press** ↵

11 Move to a check box and select it:
- **Click** the **check box** by *Display hidden/system files.*
- **Click** the **check box** by *Descending order.*
- **Press** Tab once to move to *Display hidden/system files.*
- **Press** Space
- **Press** Tab once to move to *Descending order.*
- **Press** Space

An X appears in both boxes.

12 Move to a check box and deselect an item:
- **Click** the **check box** by *Display hidden/system files.*
- **Press** Shift + Tab once to move to the **check box** by *Display hidden/system files.*
- **Press** Space

*The X is removed from the **check box** next to **Display hidden/system files**.*

13 Move to a group of option buttons and select one option:
- **Click** the **option button** by *Size.*
  *A dot appears in the option button by **Size**, and the dot disappears from the option button next to **Name**.*
- **Press** Tab twice (in the *graphics* display, the cursor seems to disappear, but it is actually in the top *option button*).
- **Press** ↓ until the dot appears in the **option button** next to *Size.*

14 Get Help in a dialog box:
(You can get help about a dialog box if it contains a *Help command button.*)
- **Click** the **Help** *command button.*
- **Press** Tab until the cursor is in the **Help** *command button.*
- **Press** ↵

*Help about the **File Display Options** dialog box appears.*

15 Cancel Help:
- **Click** the **Cancel** *command button.*
- **Press** Esc

*You are returned to the **File Display Options** dialog box.*

16 Cancel a dialog box:
(You have made several changes in the dialog box, but when you **cancel** the dialog box, the changes are **canceled** as well.)
- **Click** the **Cancel** *command button.*
- **Press** Esc

The dialog box disappears.

17 • **Exit** DOS Shell (review, Exercise 76).

18 • **Go on** to Exercise 80
or **take** the disk out of drive A: and turn the computer off.

1. • If necessary, **access** the DUPLICATE Learning Disk on drive A: and **change** to this common DOS prompt: `A:\>`

2. • **Start** DOS Shell.

3. **Change DOS Shell's color scheme:**
   - **Choose** Options, Colors... .
     The Color Scheme dialog box opens.
   - **Scroll** to the bottom of the list box.
   - **Select Turquoise**.
   - **Complete** the original command (you can just press ↵).
     The dialog box disappears, and the screen color scheme changes to Turquoise.

4. • **Change** the color scheme to **Hot Pink**.
   - **Change** the color scheme to a color scheme of your choice.
   - **Change** the color scheme to **Ocean** *and leave it there.*

5. **Change DOS Shell's display mode:**
   - **Choose** Options, Display... .
     The Screen Display Mode dialog box opens.
   - **Select Text 25 lines Low Resolution**.
   - **Complete** the original command (you can just press ↵).
     The dialog box disappears, and the Screen Display Mode changes to Text.

6. • **Change** the Screen Display Mode back to **Graphics 25 lines Low Resolution**.

7. **Change the areas viewed in DOS Shell:**
   - **Choose** View, Single File List.
     *The DOS Shell screen displays the **Disk Drives**, **Directory Tree**, and **File List** areas.*
   - **Choose** View, Dual File Lists.
     *The DOS Shell screen displays two sets of **Directory Tree** and **File List** areas.*
   - **Choose** View, All Files.
     *The DOS Shell screen displays the **Disk Drives** area and the **File List** area.*
   - **Choose** View, Program List.
     *The DOS Shell screen displays only the **Program List** area.*
   - **Choose** View, Program/File List *and leave it there.*
     The DOS Shell screen displays four areas.

8. **Enable/Disable the Task Swapper:**
   (When Task Swapper is enabled, the Active Task List area appears in the bottom right corner of the screen.)
   - **Choose** Options, Enable Task Swapper.
     The Active Task List area appears in the screen, and it is empty.
   - **Select** the different **areas** and notice that you cannot select the Active Task List area (because it is empty).
   - **Choose** Options, Enable Task Swapper.
     The Active Task List area disappears from the screen.

9. • **Exit** DOS Shell.

10. • **Go on** to Exercise 81
    or **take** the disk out of drive A: and turn the computer off.

EXERCISE 80

Change DOS Shell

Change screen colors, areas viewed, and the display; and enable/disable the Task Swapper.

OBJECTIVES:
- change DOS Shell's color scheme
- change DOS Shell's display mode
- change DOS Shell's areas viewed
- enable/disable Task Swapper

- Terms and Notes -

NOTE: The DOS Shell Screen Display Mode dialog box offers some **high-resolution** text and graphics options. *High resolution* squeezes more information on the screen, but unless your monitor is very large, the screen may be a little hard to read. Your monitor may not support high resolution.

NOTE: When a "toggle" command (such as Enable Task Swapper) is turned on, a dot appears in front of the command, but you will not see it until you access the menu again. When you turn the command off, the dot disappears, but again, you do not see it until you access the menu the next time.

STEPS to

Change the color scheme
1 **Choose** Options, Colors... .
2 **Select** the color scheme you want.
3 **Complete** the command.

Change the screen display
1 **Choose** Options, Display... .
2 **Select** the display option you want.
3 **Complete** the command.

Change the areas viewed
1 **Choose** View.
2 **Select** the view you want.

Enable/disable Task Swapper
- **Choose** Options, Enable Task Swapper.

EXERCISE 81

Select a disk drive

Make a different disk drive active.

OBJECTIVES:

- review DOS Shell to this point
- change to disk drive C:
- change back to disk drive A:

– Terms and Notes –

NOTE: There is a difference in the icons that represent hard disk drives and floppy disk drives.

represents a hard disk drive

represents a floppy disk drive

STEPS to

Change the disk drive

- **Click** the disk drive icon you want.

STEPS to

Change the disk drive

1 **Press** Tab until you **select** the Disk Drives area.
2 **Press** → or ← until you **select** the drive icon you want.
3 **Press** ↵

Review DOS Shell

Up to this point, the exercises and topic in Lesson Eight have introduced you to the DOS Shell program. You have learned about:

- DOS Shell's five areas
- DOS Shell's various bars
- DOS Shell's two display modes — text and graphics
- DOS Shell's two ways to perform actions — mouse and keyboard
- DOS Shell's menu bar
- DOS Shell's dialog boxes
- DOS Shell's color schemes
- DOS Shell's different ways to view areas

You have learned how to:

perform these actions	using the mouse	or using the keyboard
start DOS Shell	at DOS prompt, type DOSSHELL	at DOS prompt, type DOSSHELL
exit DOS Shell	click File, Exit	Press F3
select (move to) areas	click an area	press Tab or Shift + Tab
scroll lists and select an item	click scroll bar, click item	use arrows to find and select an item
use the menu bar	click the menu you want	press Alt, press the menu letter
cancel the menu bar	click off the menu	press Alt
choose a command from a menu	click the command	press the command letter
use dialog boxes	choose a command with . . .	choose a command with . . .
move around in a dialog box	click the location you want	Tab to the location you want
use text boxes	click box and type data	move to box and type information
use list boxes	click scroll bar, click item	use arrows to find and select an item
use check boxes	click the items you want	move to the box and press Space
use option buttons	click the one item you want	move to the button and use arrows
use command buttons	click command button	move to the button and press ↵
complete the original command	click OK command button	move to OK button and press ↵
cancel a dialog box	click Cancel command button	press Esc
change the display mode	click Options, Display . . .	select Options, Display . . .
change the color scheme	click Options, Colors . . .	select Options, Colors . . .
change the areas viewed	click View, select view you want	select View, then the view you want

The rest of this Lesson will examine some basic **file managing** tasks.

1 • If necessary, **access** the DUPLICATE Learning Disk on drive A: and **change** to this common DOS prompt: `A:\>`

2 • **Start** DOS Shell.

3 **Change to disk drive C:**

- **Click** C (the drive C: icon).
- **Press** Tab to move to the **Disk Drives** area.
- **Press** → to select C (the drive C: icon).
- **Press** ↵.

A box with the message "Reading Disk Information . . ." appears on the screen while DOS works, then drive C:'s directories and files appear on the screen.

4 **Change to disk drive A:**

- **Click** A (the drive A: icon).
- **Select** A (the drive A: icon).
- **Press** ↵.

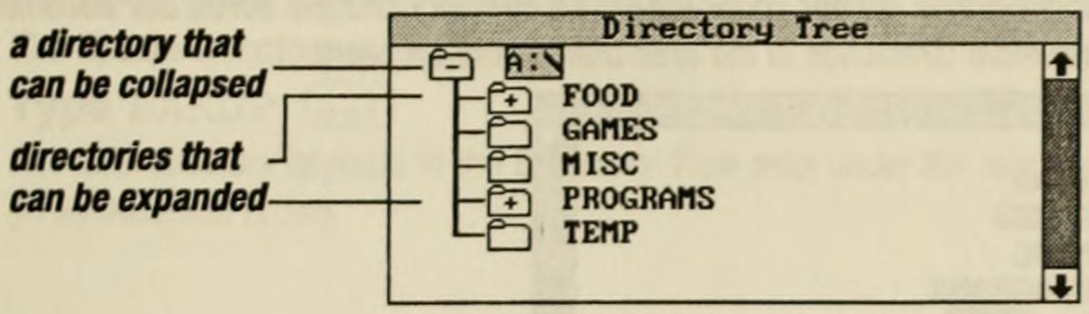
After a little time, directories and files from drive A: appear on the screen.

5 • **Go on** to Exercise 82.

Continue from Exercise 81

1 • **Select** the **Directory Tree area.**

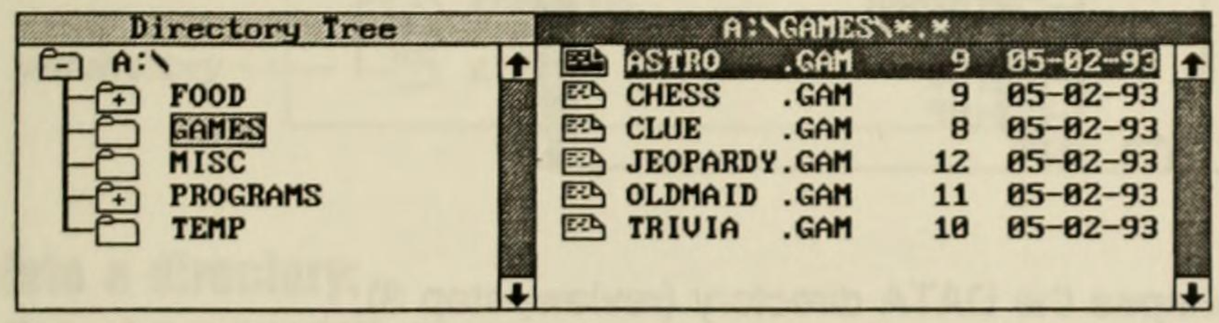
*The **Directory Tree area** on your screen should match the illustration below. The root directory and its subdirectories (in alphabetical order) are displayed.*



2 **Select a directory:**

- **Click** FOOD.
- **Click** GAMES.
- **Press** ↓ once — to highlight FOOD.
- **Press** ↓ once more — to highlight GAMES.

*Files appear in the **File List area** because there are files in the GAMES directory.*



- **Select** each of the remaining directories and notice the files displayed in the **File List area** as you select each directory.

3 **Collapse a directory:**

When a minus (-) appears on a directory icon ( ), you can *collapse* (hide directories within) that directory.

- **Click** by A:\.
- **Select** A:\ (use arrows).
- **Press** −

All the directories under the root directory (A:\) disappear and the minus on the directory icon changes to a plus (+), which means it can now be expanded.

4 **Expand a directory:**

- **Click** by A:\.
- **Press** +

The level-two directories (subdirectories of the root directory) reappear.

Expand the Programs directory:

- **Click** by PROGRAMS.
- **Select** PROGRAMS and **press** +

The DATA directory appears under the PROGRAMS directory.

Exercise 82 continued...

EXERCISE 82

Work with directories

Select a directory, collapse and expand directories, and create and delete directories.

OBJECTIVES:

- select a directory
- collapse a directory
- expand a directory
- expand a directory branch
- expand *all* directories
- create a directory
- delete a directory

– Terms and Notes –

select directories
To highlight a directory.

collapse directories
To hide directory levels. Directories that can be *collapsed* have a minus (-) on their *directory icon* .

expand directories
To display unseen subdirectories. Directories that can be *expanded* have a plus (+) on their *directory icon* .

expand directory branch
To display all directory levels under the selected directory.

expand all directories
To display all the directories on the disk.

directory icon
The small picture of a file folder next to a directory name.

STEPS to

STEPS to are on the next page.

STEPS to

Select a directory
- **Click** the directory name you want.

Collapse a directory
- **Click** ⊟ by the directory you want.

Expand a directory
- **Click** ⊞ by the directory you want.

Expand a directory branch
1 **Select** the directory branch you want.
2 **Click** Tree, Expand Branch.

Expand *all* directories
- **Click** Tree, Expand All.

Create a directory
1 **Click** File, Create Directory... .
2 **Type** the directory name; **press** ↵

Delete a directory
1 **Select** the directory to delete.
2 **Click** File, Delete Directory..., **Yes**.

STEPS to

Select a directory
- **Press** ↑ or ↓ to highlight the directory you want.

Collapse a directory
1 **Select** the directory you want with the ⊟ icon by it.
2 **Press** −

Expand a directory
1 **Select** the directory you want with the ⊞ icon by it.
2 **Press** +

Expand a directory branch
1 **Select** the directory branch you want to expand with the ⊞ icon by it.
2 **Press** *

Expand *all* directories
- **Press** Ctrl+*

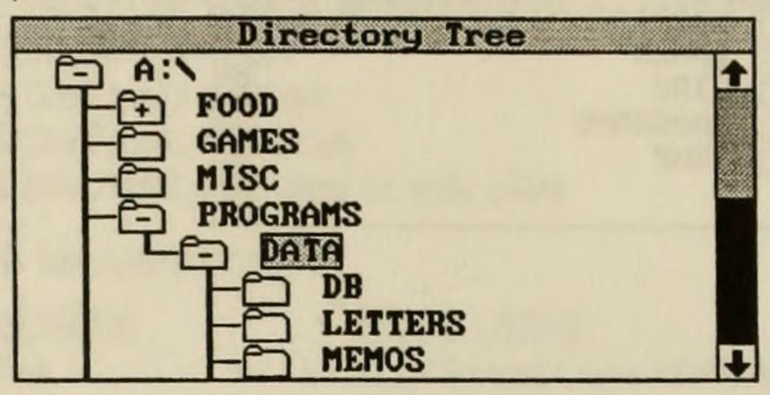
Create a directory
1 **Press** Alt+F (File), E (Create Directory...).
2 **Type** the directory name.
3 **Press** ↵

Delete a directory
1 **Select** the directory to delete.
2 **Press** Del, ↵

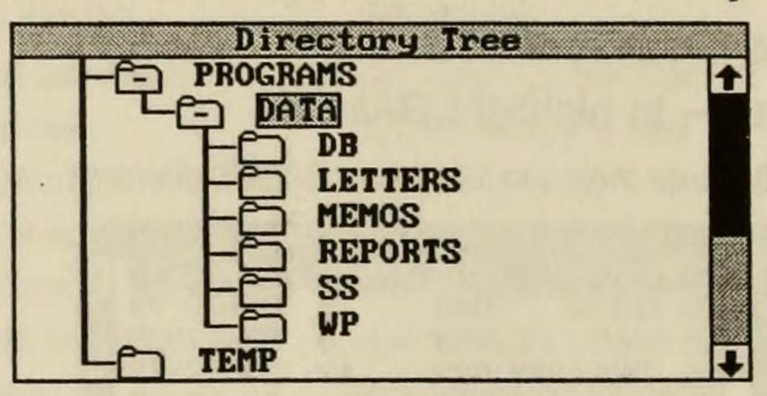
Step 4, Expand a directory (continued)

Expand the DATA directory:
- **Click** ⊞ by DATA.
- **Select** DATA and **press** +

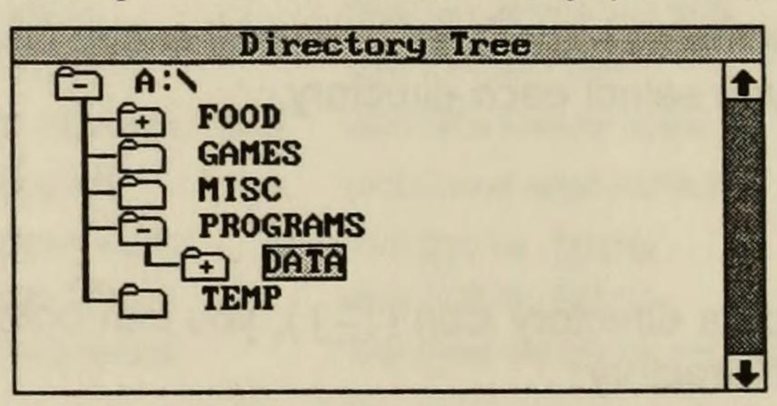
*The DATA subdirectories appear under the DATA directory and the **scroll bar** becomes active (since there are more directories in the area that cannot be seen).*



- **Scroll** to the bottom of the **Directory Tree area.**



5
- **Collapse** the DATA directory (review, step 3).



- **Collapse** the PROGRAMS directory (review, step 3).

The DATA directory disappears, and a plus appears in the PROGRAMS directory icon.

6 Expand an entire directory branch:
(expand the PROGRAMS directory branch)
- **Select** the PROGRAMS directory, if necessary.
- **Click** Tree, Expand Branch.
- **Press** *

The entire PROGRAMS directory branch is displayed.
- **Collapse** the PROGRAMS directory.

7 Expand all directories:
- **Click** Tree, Expand All.
- **Press** Ctrl+*

All the directories on disk drive A: are displayed.
- **Scroll** to the bottom of the list.

8
- **Collapse** the root directory (review, step 3).
- **Expand** the root directory (review, step 4).

Exercise 82 continued...

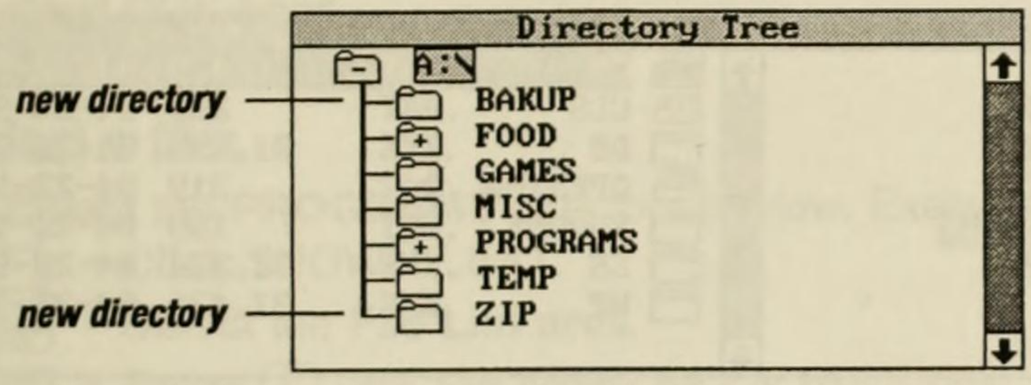
9 • **Select** the root (A:\) directory.

10 **Create a directory:**

• **Choose** File, Create Directory... .
*The **Create Directory** dialog box appears.*

• **Type** BAKUP ↵
*The new directory appears in the **Directory Tree area** under the root directory (in alphabetical order).*

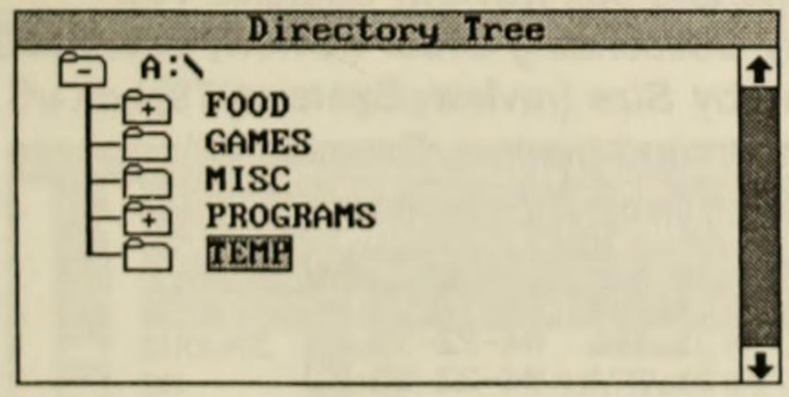
11 • **Create** a new directory; name it **ZIP** (review, step 10).
*The new directory appears in the **Directory Tree area** at the bottom of the list (in alphabetical order).*



12 **Delete a directory:**

• **Select** the BAKUP directory.
• **Click** File, Delete... .
• **Press** Del
*The **Delete Directory Confirmation** dialog box appears and asks "Delete A:\BAKUP?" and the cursor appears in the **OK** command button.*
• **Click** the **Yes** command button.
• **Press** ↵
The BAKUP directory disappears.

13 • **Delete** the ZIP directory (review, step 12).
The ZIP directory disappears.



14 • **Exit** DOS Shell.

15 • **Go on** to Exercise 83
or **take** the disk out of drive A: and turn the computer off.

EXERCISE 83

Change the File List Display

View specific files and change the way files are sorted.

OBJECTIVES:

- open the *Display File Options* dialog box
- enter a *filename pattern* so the *File List area* will display specific files
- change the sort order of the *file list* display
- change to a descending sort order
- return the File List Display to its original values

STEPS to

View specific files

1 **Choose** Options, File Display Options...
2 **Select** the **Name** text box.
3 **Type** the *filename pattern* you want to display.
4 **Complete** the original command.

Sort files

1 **Choose** Options, File Display Options...
2 **Select** the option button by the sort order you want.
3 **Select** descending order.
or
Deselect descending order (if you want ascending order).
4 **Complete** the original command.

Using File Display Options

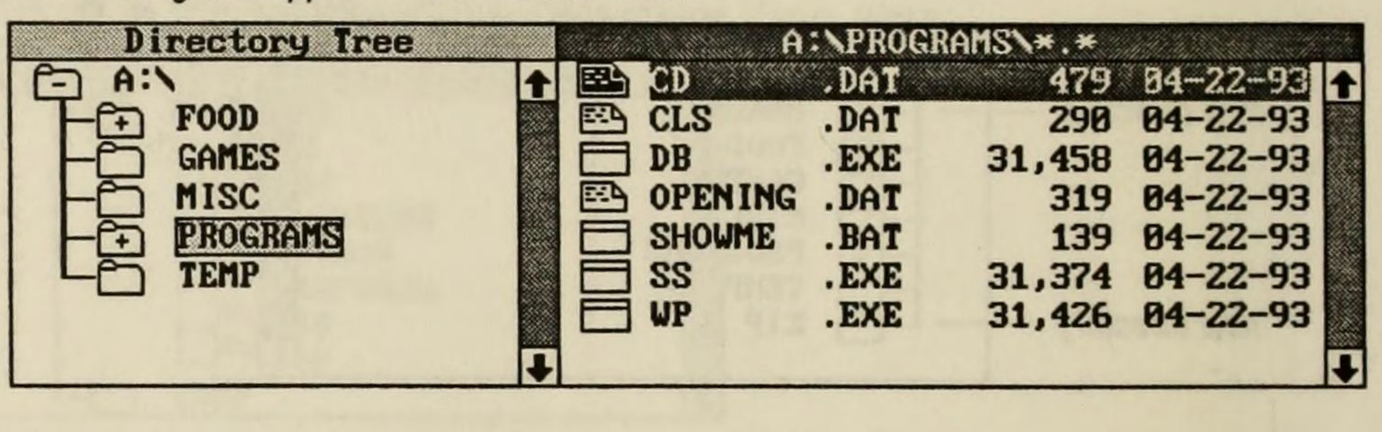
When you first start DOS Shell, files are sorted alphabetically, and hidden files and system files are not displayed. Using the *Files Display Options*, you can:

- select specific files to be displayed, for example, files ending with .EXE,
- sort files different ways and in ascending or descending order, and/or
- display hidden/system files.

❶ • If necessary, **access** the DUPLICATE Learning Disk on drive A: and **change** to this common DOS prompt: `A:\>`

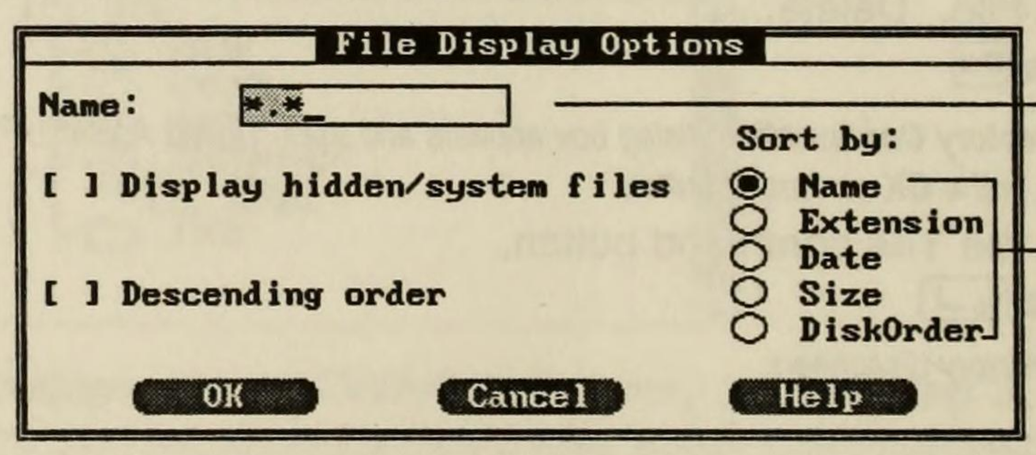
❷ • **Start** DOS Shell.

❸ • **Select** the PROGRAMS directory.
*The following files appear in the **File List area**.*



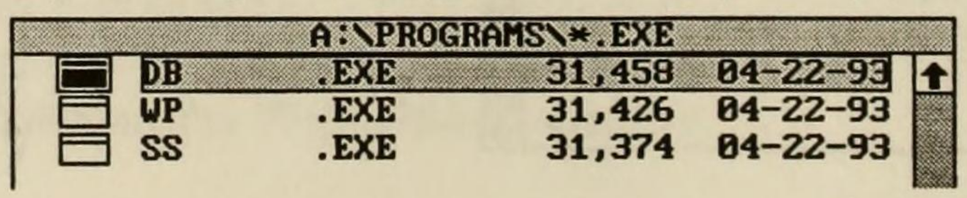
❹ **Open the Files Display Options dialog box:**

- **Choose** Options, File Display Options...
The File Display Options dialog box opens.



❺ **Make changes that will affect the File List display:**

- **Type** * . EXE in the **Name** *text box* (review, Exercise 79).
- **Select** the **check box** by *Descending Order* (review, Exercise 79).
- **Select** the **option button** by *Size* (review, Exercise 79).
- **Complete** the original command (review, Exercise 79).
Only files ending with .EXE appear, in descending order by size.



❻ **Return the File Display Options to their original values:**

- **Choose** Options, File Display Options...
- **Type** * . * in the **Name** *text box* (review, Exercise 79).
- **Deselect** the **check box** by *Descending Order* (review, Exercise 79).
- **Select** the **option button** by *Name* (review, Exercise 79).
- **Complete** the original command (review, Exercise 79).
All the files in the PROGRAMS directory appear, and they are in alphabetical order.

❼ • **Go on** to Exercise 84.

Selecting files

Before you can work with files, you must *select* (highlight) them. In DOS Shell, you can select:
- a single file
- multiple adjoining files
- multiple non-adjoining files
- separate sets of adjoining files
- all files

After you select a file or files, you can perform actions on them, such as *move*, *copy*, *delete*, and *rename*.

1 • If necessary, **access** the DUPLICATE Learning Disk on drive A: and **change** to this common DOS prompt: `A:\>`

2 • **Start** DOS Shell.

3 **Select a file:**

• **Select** the **PROGRAMS** directory (review, Exercise 82, step 2).

• **Click** SHOWME.BAT.

• **Select** the **File List area**.

• **Press** ↓ until SHOWME.BAT is highlighted.

SHOWME.BAT (with the icon beside it) is highlighted.

4 **Select multiple adjoining files:**

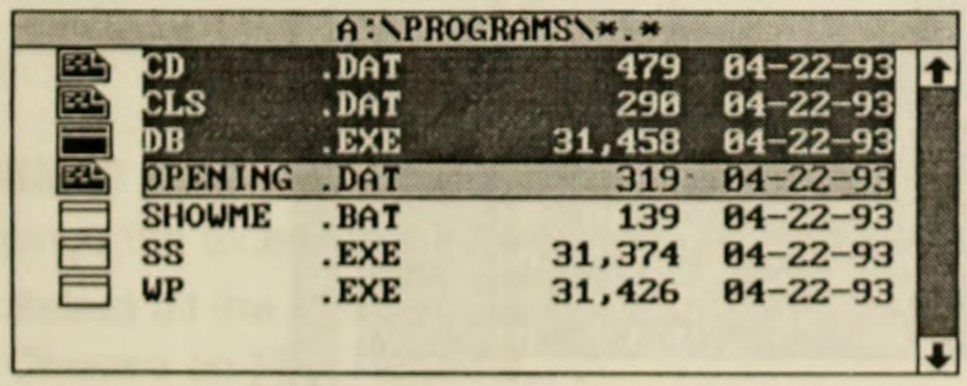
(select the first four files)

• **Select** CD.DAT.

• **Press** Shift *while* you **click** OPENING.DAT.

• **Press** Shift *while* you **press** ↓ three times.

The top four files are highlighted.



5 **Select multiple non-adjoining files:**

(select every other file, starting with the first file)

• **Select** CD.DAT.

• **Press** Ctrl while you **click** DB.EXE, SHOWME.BAT, and WP.EXE.

• **Press** Shift + F8

***Add mode** is turned on, and ADD appears on the right end of the status bar.*

Exercise 84 continued...

EXERCISE 84

Select files

Highlight a file or multiple files so you can perform an action on them.

OBJECTIVES:
- select a single file
- select adjoining files
- select non-adjoining files
- select separate sets of adjoining files
- select all files
- deselect all files

- Terms and Notes -

data file
A file that consists of data created in a program, such as a *letter* typed in a word processor.

program file
A file that holds a set of instructions that perform a task, such as a word processor.

STEPS to

Select a file
1 **Select** the **directory** that holds the file you want.
2 **Click** the *filename* you want.

Select multiple adjoining files
1 **Click** the first file in the group.
2 **Press** Shift *while* you **click** the last file in the group.

Select multiple non-adjoining files
1 **Click** the first file you want.
2 **Press** Ctrl *while* you **click** each additional file you want.

Mouse STEPS continued...

Exercise 84 (continued)
Select files

STEPS to (continued)

Select separate sets of adjoining files
1 **Click** the first file in the first set.
2 **Press** Shift *while* you **click** the last file in the first set.
3 **Press** Ctrl *while* you **click** the first file of the next set.
4 **Press** Ctrl + Shift *while* you **click** the last file of this set.
5 **Repeat** steps 3 and 4 for each additional set of files you want.

Select all files
- **Choose** File, Select All.

Deselect all files
- **Choose** File, Deselect All.

STEPS to

Select a file
1 **Select** the **directory** that holds the file you want.
2 **Select** the *File List area.*
3 **Press** ↓ or ↑ to highlight the file you want.

Select multiple adjoining files
1 **Select** the first file in the set.
2 **Press** Shift *while* you **press** ↓ or ↑ to highlight the additional files in the set.

Select multiple non-adjoining files
1 **Select** the first file you want.
2 **Press** Shift + F8 to turn ADD mode on.
3 **Press** ↓ or ↑ to highlight an additional file you want and **press** Space to select it.
4 **Repeat** step 3 until all additional files are selected.
5 **Press** Shift + F8 to turn ADD mode off.

Select separate sets of adjoining files
- **Repeat** the steps for **selecting multiple non-adjoining files** (above).

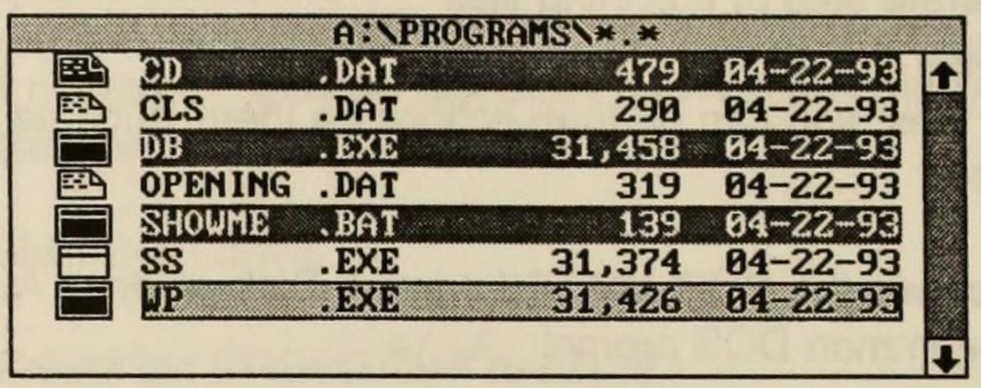
Select all files
- **Choose** File, Select All.

Deselect all files
- **Choose** File, Deselect All.

Step 5 (continued)
- **Press** ↓ twice and **press** Space
- Repeat the step above two more times.
- **Press** Shift + F8

***Add mode** is turned off, and ADD disappears from the status bar.*

Every other file is selected.



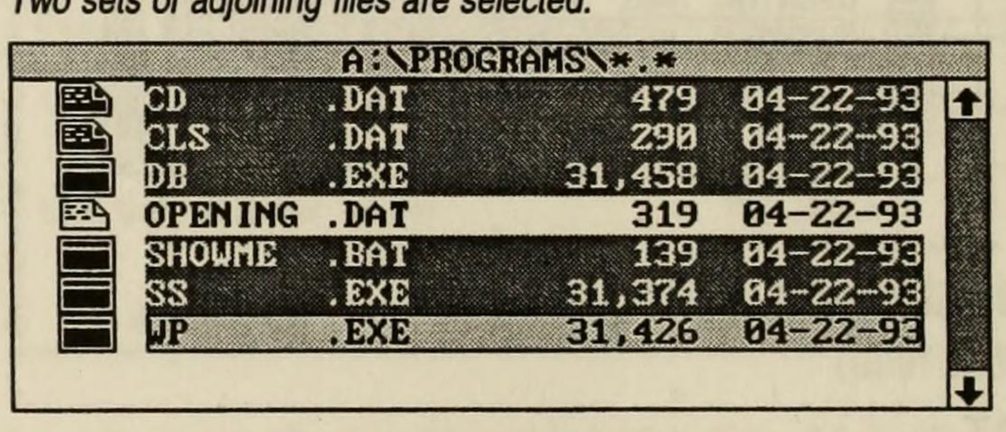
6 Select separated sets of adjoining files:
- **Select** CD.DAT.
- **Press** Shift *while* you **click** DB.EXE.
- **Press** Ctrl *while* you **click** SHOWME.BAT.
- **Press** Shift + Ctrl *while* you **click** WP.EXE.

*The word **ADD** appears toward the right end of the **status bar** (bottom of screen).*

- **Press** Shift + F8
- **Press** ↓, Space, ↓, Space
- **Press** ↓
- **Press** ↓, Space, ↓, Space
- **Press** Shift + F8

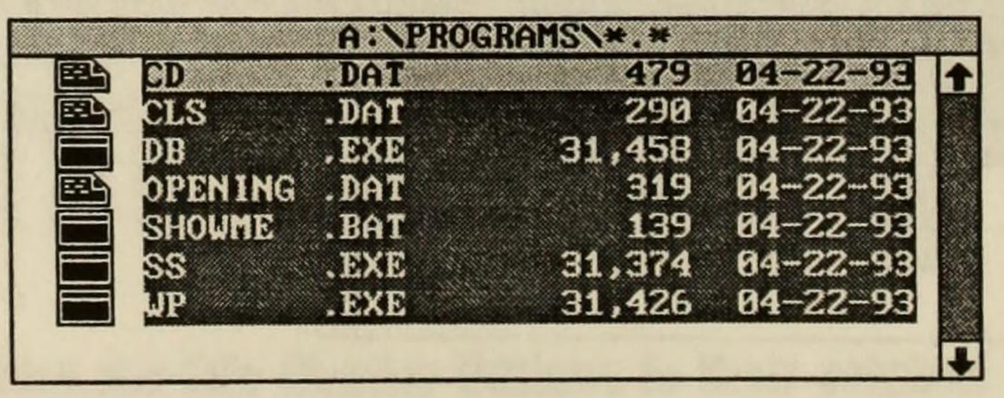
*The word **ADD** disappears from the **status bar.***

Two sets of adjoining files are selected.



7 Select all files:
- **Select** CD.DAT.
- **Choose** File, Select All.

All the files are selected.



8 Deselect all files:
- **Choose** File, Deselect All.

*All the files are **deselected** except the top one, which remains selected by default.*

9
- **Exit** DOS Shell.

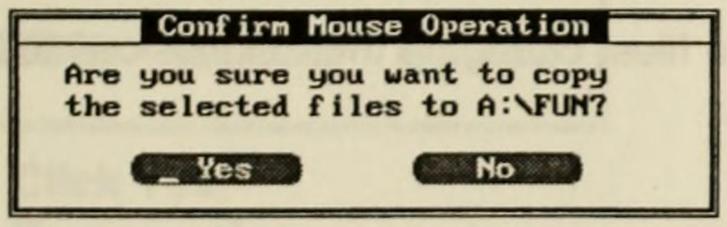
10
- **Go on** to Exercise 85
  or **take** the disk out of drive A: and turn the computer off.

1. • If necessary, **access** the DUPLICATE Learning Disk on drive A: and **change** to this common DOS prompt: `A:\>`

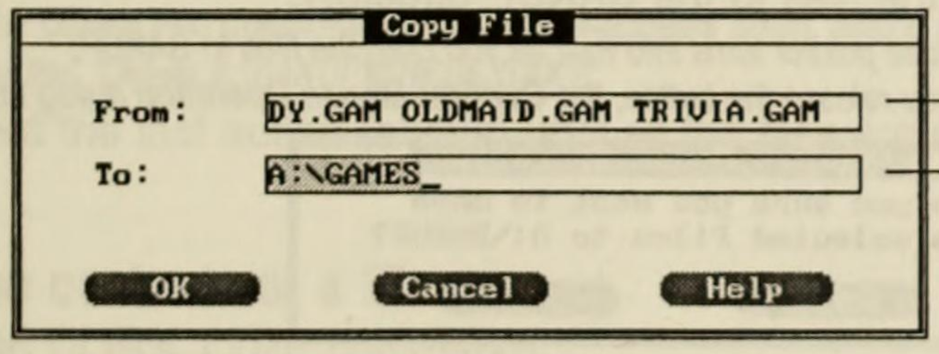
2. • **Start** DOS Shell.

3. • **Select** the A:\ (root) directory (review, Exercise 82).
   • **Create** a directory; name it BAKUP (review, Exercise 82).
   • **Create** a directory; name it FUN (review, Exercise 82).
   • **Select** the GAMES directory (review, Exercise 82).
   Six game files are displayed in the File List area.

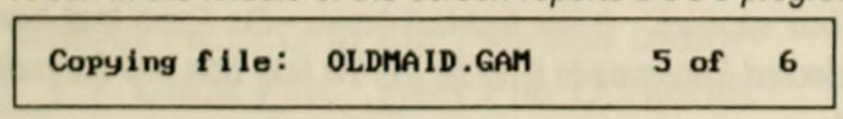
4. **Copy files to another directory:**
   (copy files in the GAMES directory to the FUN directory)
   • **Select** all the files in the File List area (review, Exercise 84).
   • **Press** Ctrl *while* you **drag** the files to the FUN directory.
   The mouse pointer turns into as you drag the files to FUN.
   *When you release the mouse, the **Confirm Mouse Operation** dialog box appears.*



   • **Click Yes**.
   • **Press** F8
   *The **Copy File** dialog box appears.*

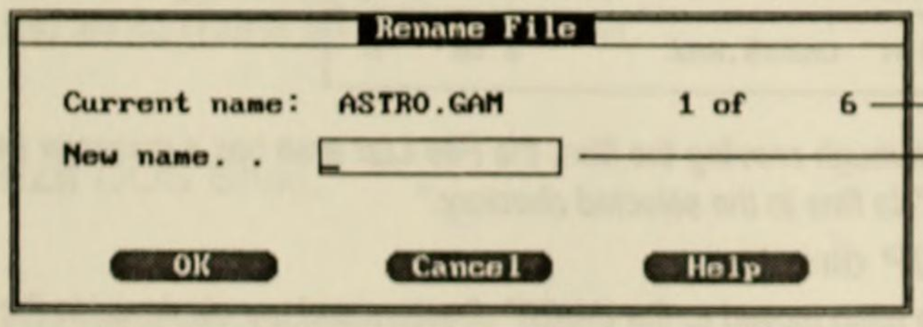


   • **Type** `A:\FUN` Enter
   A box in the middle of the screen reports DOS's progress.



   • **Select** the FUN directory (review, Exercise 82)
   *The **game** files that you **copied** to the FUN directory are displayed in the File List area.*

5. **Rename files:**
   (change the extension on all files in the FUN directory from .GAM to .BAK)
   • **Select** all the files in the *File List area* (review, Exercise 84).
   • **Choose** on File, Rename... .
   *The **Rename File** dialog box appears.*



   • **Type** `ASTRO.BAK` Enter
   The dialog box reappears, asking you to rename the next file on the list, CHESS.GAM.

Exercise 85 continued...

EXERCISE 85

Work with files

Move, copy, delete, and rename files; and view the contents of a file.

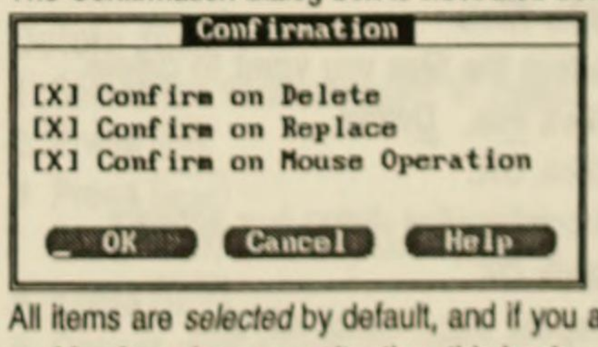
OBJECTIVES:
- copy files to another directory
- rename files
- purposely type an invalid filename when renaming a file
- move files to another directory
- delete files
- view the contents of a file

– Terms and Notes –

NOTE: There are three confirmation dialog boxes in DOS Shell that may appear when working with files (two of them are accessed in this exercise):
Confirm Mouse Operation
Delete File Confirmation
Replace File Confirmation

The *Replace File Confirmation* dialog box answers the criticism of the fact that when you work at the DOS prompt, DOS does not warn you when you are about to replace an existing file with a file of the same name as you copy or move files. DOS has also been criticized for allowing you to *delete* files without warning you that you are deleting files. However, it can be tedious to have to "give permission" for each file you want to delete. With DOS Shell, you can turn confirmation dialog boxes off and on by choosing Options, Confirmation and selecting or deselecting the check boxes for:
Confirm on Delete
Confirm on Replace
Confirm on Mouse Operation

The Confirmation dialog box is illustrated below:



All items are *selected* by default, and if you are working in a classroom situation, this book recommends that you leave confirmation turned on for all three items.

STEPS to

STEPS to are on the next two pages.

WARNING: You should always read the information in dialog boxes carefully. It is easy to quickly accept < OK > only to get an unwanted action; for example, files may be *moved* instead of *copied*.

STEPS to

Copy files to another directory

1 **Select** the files you want to copy.
2 **Press** Ctrl while you **drag** the files to the directory you want to copy files to.
The mouse confirmation dialog box appears.
3 **Click Yes.**

Rename files

1 **Select** the files you want to rename.
2 **Click** File, Rename... .
3 **Type** the new name for the file.
4 **Press** ↵
5 **Repeat** steps 3 and 4 until all files are renamed.

Move files to another directory

1 **Select** the files you want to move.
2 **Drag** the files to the directory you want to move files to.
The mouse confirmation dialog box appears.
3 **Click Yes.**

Delete files

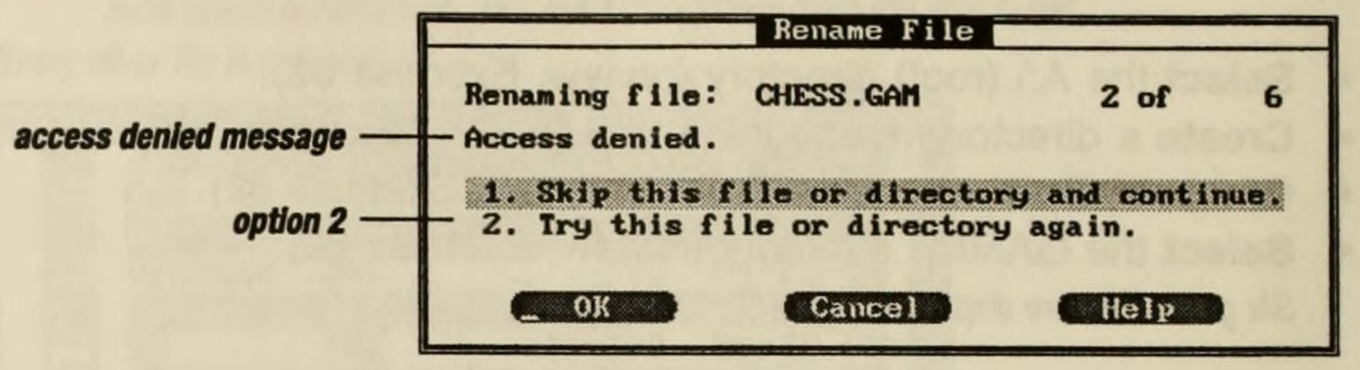
1 **Select** the files you want to delete.
2 **Click** File, Delete... .
3 **Click OK.**
A confirmation dialog box appears.
4 **Click OK.**
5 **Repeat** step 4 until all files are deleted.

View the contents of a file

1 **Select** the file you want to view.
2 **Click** File, View File Contents.
3 **Click** View, Restore when you are through viewing the file.

❻ Purposely type an invalid filename when renaming a file:

- **Type** CHESS.GAM ↵
(you cannot rename a file to the same name).
*The dialog box disappears, then reappears with an **access denied** message.*

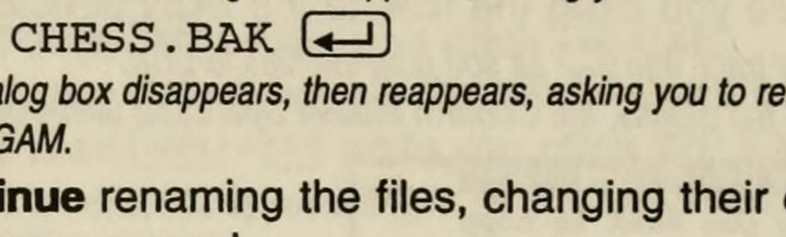


- **Select** option *2. Try this file or directory again.*
- **Click OK.**
- **Press** ↵
The Rename File dialog box reappears, asking you to rename CHESS.GAM again.
- **Type** CHESS.BAK ↵
The dialog box disappears, then reappears, asking you to rename the next file on the list, CLUE.GAM.
- **Continue** renaming the files, changing their extensions to .BAK until all files are renamed.

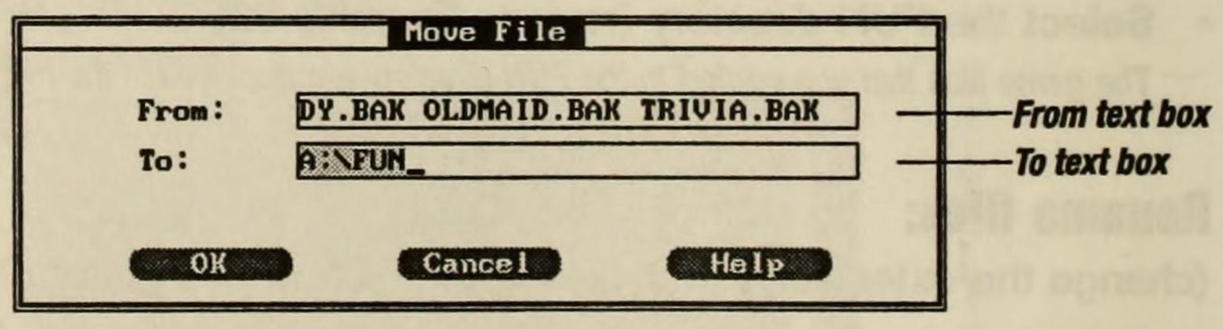
❼ Move files to another directory:

(move all the files from the FUN directory to the BAKUP directory)

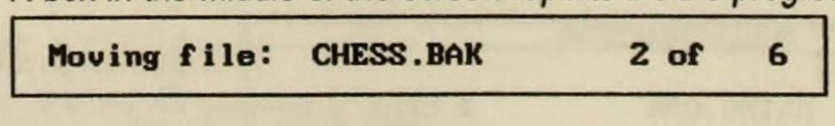
- **Select** all the files in the *File List area* (review, Exercise 84).
- **Drag** the files to the BAKUP directory.
The mouse pointer turns into ⧉ as you drag the files to BAKUP.
*When you release the button, the **Confirm Mouse Operation** dialog box appears.*



- **Click Yes.**
- **Press** F7
*The **Move File** dialog box appears. It has two text boxes—the **From text box** has the last part of your selected filenames in it, while the **To text box** has the **path** to your selected files in it.*



- **Type** A:\BAKUP ↵
A box in the middle of the screen reports DOS's progress.



*When DOS is through **moving** the files, the **File List area** has a message saying that there are "No files in the selected directory."*
- **Select** the BAKUP directory.
*All six **game** files have been moved to the BAKUP directory and are displayed in the **File List area**.*

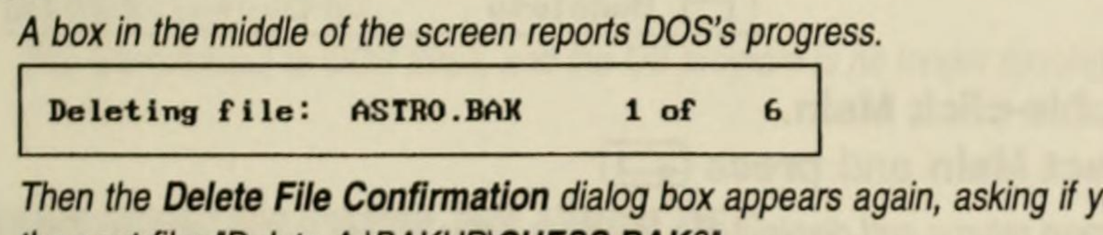
Exercise 85 continued...

❽ Delete files:

(delete all the files in the BAKUP directory)

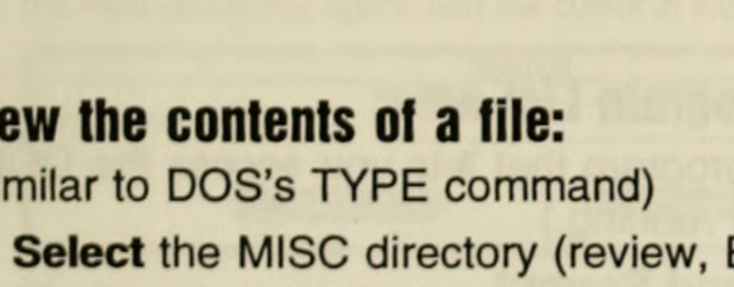
- **Select** all the files in the *File List area* (review, Exercise 84).
- **Click** File, Delete... .
- **Press** Del

*The **Delete File** dialog box appears. It has one text box with the last part of your selected files in it, and the cursor is positioned in the **OK** command button.*



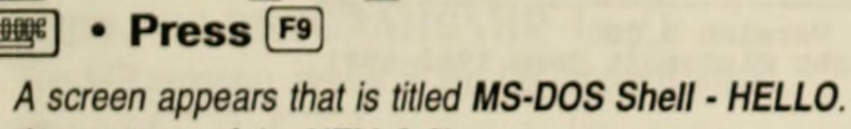
- **Click OK.**
- **Press** ↵

*The **Delete File Confirmation** dialog box appears asking if you want to "Delete A:\BAKUP**ASTRO.BAK**?"*



- **Click Yes.**
- **Press** ↵

A box in the middle of the screen reports DOS's progress.



*Then the **Delete File Confirmation** dialog box appears again, asking if you want to delete the next file: "Delete A:\BAKUP**CHESS.BAK**?"*

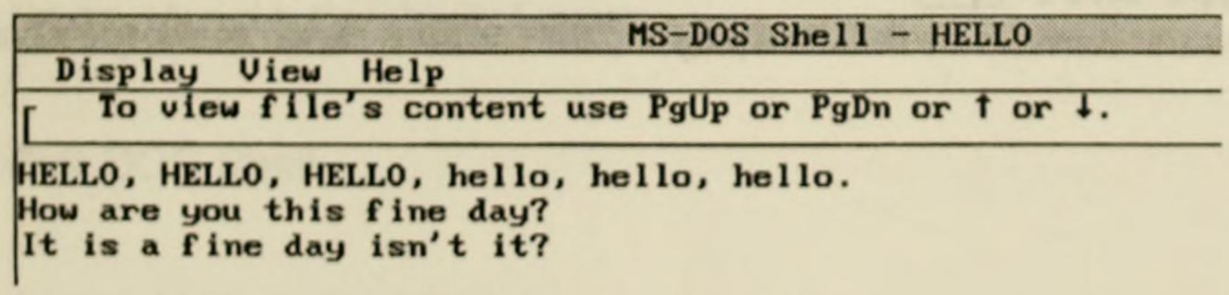
- **Repeat** the last action (above) until all the files are deleted.

❾ View the contents of a file:

(similar to DOS's TYPE command)

- **Select** the MISC directory (review, Exercise 82).
  *The files in the PROGRAMS directory appear in the **File List area**.*
- **Select** HELLO in the *File List area*.
- **Click** File, View File Contents.
- **Press** F9

*A screen appears that is titled **MS-DOS Shell - HELLO**. It has its own **menu bar** and it displays the contents of the HELLO file.*



- **Choose** View, Restore.
  You are returned to the DOS Shell screen.

❿

- **Exit** DOS Shell.

⓫

- **Go on** to Exercise 86
  or **take** the disk out of drive A: and turn the computer off.

STEPS to

Copy files to another directory

1 **Select** the files you want to copy.
2 **Press** F8
3 **Type** the path to the directory you want to copy to.
4 **Press** ↵

Rename files

1 **Select** the files you want to rename.
2 **Choose** File, Rename... .
3 **Type** the new name for the file.
4 **Press** ↵
5 **Repeat** steps 3 and 4 until all files are renamed.

Move files to another directory

1 **Select** the files you want to move.
2 **Press** F7
3 **Type** the path to the directory you want to move files to.
4 **Press** ↵

Delete files

1 **Select** the files you want to delete.
2 **Press** Del
3 **Press** ↵
A confirmation dialog box appears.
4 **Press** ↵
5 **Repeat** step 4 until all files are deleted.

View the contents of a file

1 **Select** the file you want to view.
2 **Press** F9
3 **Choose** View, Restore when you are through viewing the file.

EXERCISE 86

Run a program

To use different methods to start programs from DOS Shell.

OBJECTIVES:

- examine the *Program List area*
- run a program from the *Program List area*
- run a program from the *File List area*
- run a program using the *menu bar*

- Terms and Notes -

Program List area
The area of DOS Shell that is designed with features that let you organize **program files** called **program items** into groups called **program groups**.

program item
A *program file* listed in the *Program List area*.

program group
A name in the *Program List area* which opens a list of additional programs that are not displayed originally. Program groups are similar to a *sub-menu* which contains additional options.

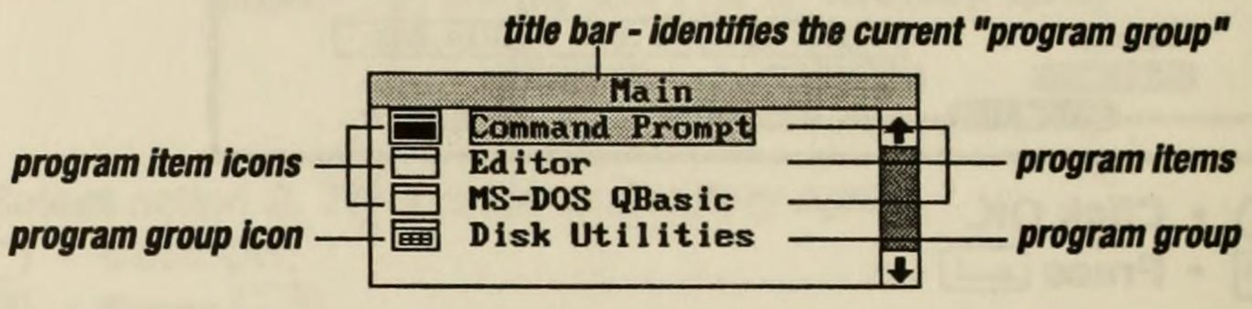
NOTE: In addition to **running a program**, the **Program List area** of DOS Shell lets you organize program files into groups and add "program items" to the groups. This book does not instruct you to add program items or program groups to the Program List area.

❶ • If necessary, **access** the DUPLICATE Learning Disk on drive A: and **change** to this common DOS prompt: `A:\>`

❷ • **Start** DOS Shell.

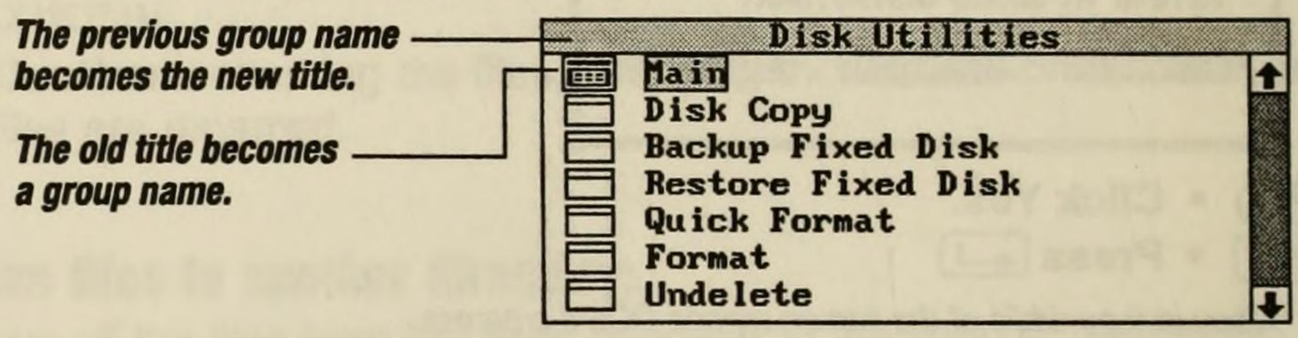
❸ **Examine the Program List area:**

• **Select** the **Program List area.**



• **Double-click Disk Utilities.**
• **Select Disk Utilities** and **press** ↵

*The **Disk Utilities group** opens and displays the "program items" within that group.*



• **Double-click Main.**
• **Select Main** and **press** ↵

*The **Main group** returns and displays the "program items" within that group, and **Disk Utilities** becomes a group name again.*

❹ **Run a program from the Program List area:**

(Run Command Prompt — a program that lets you access the DOS prompt while DOS Shell is still running.)

• **Double-click Command Prompt.**
• **Select Command Prompt** and **press** ↵

You are placed at the DOS prompt for disk drive A:.

```
Microsoft(R) MS-DOS(R) Version 5.00
             (C)Copyright Microsoft Corp 1981-1991
A:\>
```

• **Type** `EXIT` ↵

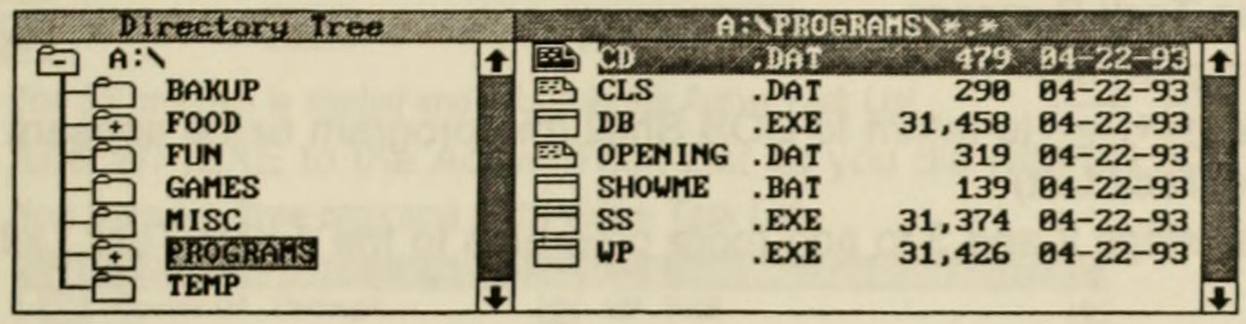
You are returned to the DOS Shell program, and Command Prompt is no longer running.

Exercise 86 continued...

❺ Run a program from the File List area:

- **Select** the **Directory Tree area**
- **Select** the PROGRAMS directory.

*Files in the PROGRAMS directory are displayed in the **File List area**.*



- **Double-click** DB.EXE.
- **Select** DB.EXE. and **press** ↵

The "mock" database program starts.

```
                    * * * Database Program * * *
If this was a real database program
you would use it to:
    * Create a record structure for a database file.
    * Add data into the records.
    * Find and modify database records.
    * Query the database -- ask it to show specific records.
    * Create and print reports that summarize the records.
Press <Enter> to exit this program ?
```

- **Press** ↵

The DOS Shell program prompts you to "Press any key to return to MS-DOS Shell."

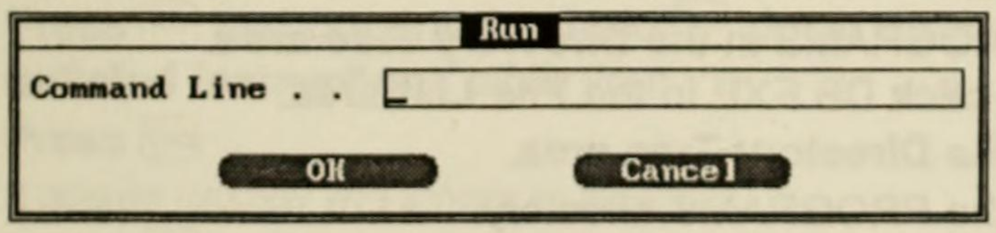
- **Press** ↵ again.

You are returned to DOS Shell, and the DB program is no longer running.

❻ Run a program using the menu bar:

- **Choose** File, Run... .

*The **Run** dialog box opens with the cursor in the Command Line text box.*



*NOTE: If the directory which holds the program is **current**, you do not need to type the full path to the program; however, you are instructed to enter the full path even though PROGRAMS is current.*

- **Type** `A:\PROGRAMS\WP` ↵

The WP program, similar to the DB program, starts.

- **Press** ↵, ↵

You are returned to the DOS Shell program.

❼ • **Exit** DOS Shell.

❽ • **Go on** to Exercise 87
or **take** the disk out of drive A: and turn the computer off.

STEPS to

Open a program group
- **Double-click** a *program group.*

Run a program from Program List area
- **Double-click** a *program item.*

Run a program from File List area
- **Double-click** a *program* file.

Run a program using the menu bar
1 **Click** File, Run... .
2 **Type** the path to the program filename, including the filename.
3 **Press** ↵

STEPS to

Open a program group
1 **Select** a *program group.*
2 **Press** ↵

Run a program from Program List area
1 **Select** a *program item.*
2 **Press** ↵

Run a program from File List area
1 **Select** a *program* file.
2 **Press** ↵

Run a program using the menu bar
1 **Choose** File, Run... .
2 **Type** the path to the program filename, including the filename.
3 **Press** ↵

EXERCISE 87

Use Task Swapper

To enable Task Swapper, start several programs, and switch between them.

OBJECTIVES:

- enable Task Swapper
- start a program
- switch from a program to DOS Shell
- add a program to the Active Task List without entering the program
- switch to a program from DOS Shell
- cycle through the open programs
- exit each program before you exit DOS Shell
- disable the Task Swapper

– Terms and Notes –

Task Swapper
A DOS Shell feature that lets you run two or more programs at the same time and switch between them.

Using Task Swapper

Task Swapper is a DOS Shell feature that lets you start multiple programs and switch between them. You must *enable* Task Swapper by choosing it from the Options menu. To run multiple programs:

1. enable Task Swapper
2. start a program
3. press Ctrl + Esc to return to DOS Shell (the program name appears in the Active Task List)
4. repeat steps 2 and 3 to add more programs to the Active Task List

❶ • If necessary, **access** the DUPLICATE Learning Disk on drive A: and **change** to this common DOS prompt: `A:\>`

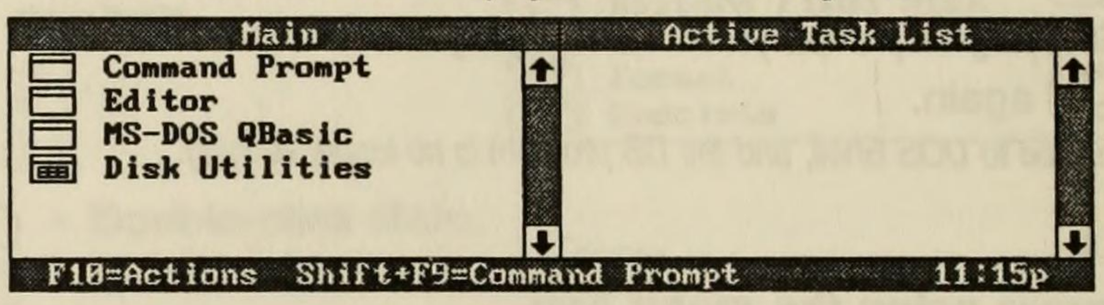
❷ • **Start** DOS Shell.

❸ Enable Task Swapper:

If the **Active Task List area** is displayed, go on to step 4.

• **Choose** Options, Enable Task Swapper.

*The **Active Task List area** is displayed in the bottom right corner.*



❹ Start a program:

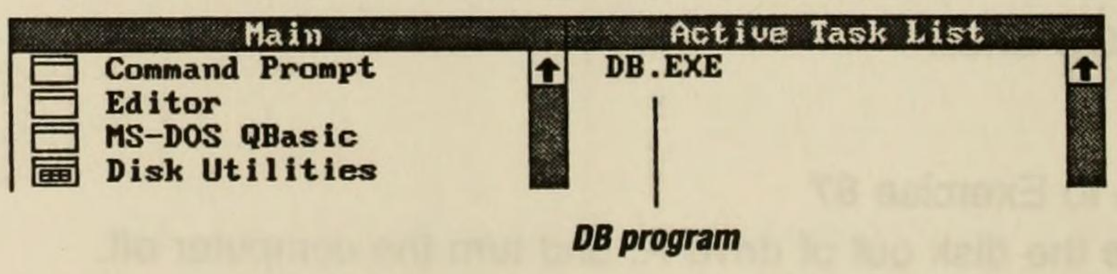
• **Click** PROGRAMS in the **Directory Tree area.**
• **Double-click** DB.EXE in the **File List area.**
• **Select** the **Directory Tree area.**
• **Select** the PROGRAMS directory.
• **Select** the **File List area.**
• **Select** DB.EXE and **press** ↵

The DB program is started — DO NOT PRESS ENTER (do not exit DB).

❺ Switch from a program to DOS Shell (without quitting a program):

• **Press** Ctrl + Esc

You are returned to DOS Shell, and the DB program is listed in the Active Task List area.



NOTE: Windows should not running while you are doing these exercises. If Windows is running, Ctrl + Esc will access Windows' Task List instead of the Task Swapper in DOS Shell.

Exercise 87 continued...

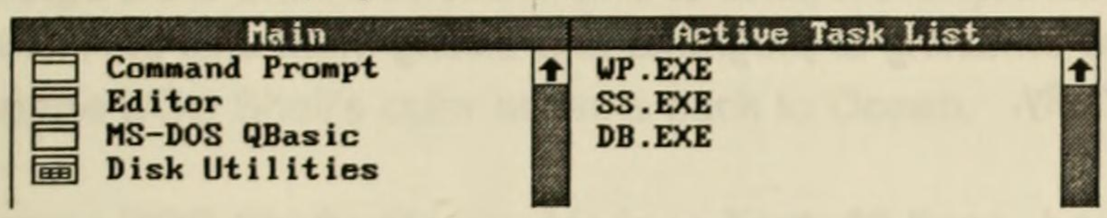
❻ Add a program to the Active Task List without accessing the program:

- **Press** Shift *while* you **double-click** SS.EXE.
- **Select** SS.EXE.
- **Press** Shift *while* you **press** ↵

The SS program is started and added to the Active Task List.

- **Add** WP.EXE to the Active Task List as you did with SS.EXE.

Now there are three programs in the Active Task List



❼ Switch to a program from DOS Shell:

- **Double-click** DB.EXE in the Active Task List.
- **Select** the **Active Task List area**.
- **Select** DB.EXE and **press** ↵

*You are **switched** to the DB program.*

- **Press** Ctrl + Esc (to return to DOS Shell).
- **Switch** to SS.EXE.
- **Press** Ctrl + Esc again.
- **Switch** to WP.EXE.
- **Press** Ctrl + Esc again.

❽ Cycle through the open programs:

(From any area within DOS Shell)

- **Press** Alt and **continue to hold** Alt **down through the next 5 bulleted instructions** *while* you:
- **Press** Tab

A program (probably WP) appears on the screen.

- **Press** Tab again.

A bar appears across the top of your screen (probably with this title).

```
MS-DOS Shell
```

- **Press** Tab again.

A bar appears across the top of your screen (probably with this title).

```
SS.EXE
```

- **Press** Tab again.

A bar appears across the top of your screen (probably with this title).

```
DB.EXE
```

- **Press** Tab again.

A bar appears across the top of your screen (probably with this title).

```
WP.EXE
```

- **Release** Alt

A program (probably WP) appears on the screen.

*NOTE: The **bars** across the top of your screen may be in a different order, but when you **hold** Alt down and **press** Tab, DOS Shell will rotate through the **programs** in the Active Task List. When you **release** Alt you will access the program whose name is in the **bar**.*

Exercise 86 continued...

STEPS to

Enable/disable Task Swapper

1 Click Options.
2 Click Enable Task Swapper to turn it on or off (it is a toggle command). When a diamond appears by the command, it is on.

Start a program

- Use one of three methods to *run* a program described in Exercise 86's "Steps to."

Switch from a program to DOS Shell

- Press Ctrl + Esc

Switch from DOS Shell to a program

- **Double-click** the program you want in the Active Task List.

Add a program to the Active Task List

- **Press** Shift *while* you **double-click** the program file you want.

Cycle through the open programs

1 **Press** and **hold down** Alt *while* you **tap** Tab
2 **Release** Alt when the program you want appears in the bar.

Quit programs

(remove their names from the Active Task List)

1 **Switch** to a program from DOS Shell.
2 **Exit** the program.
You are returned to DOS Shell and the program is removed from the Active Task List.

STEPS to

Keyboard steps are on the next page.

STEPS to

Enable/disable Task Swapper
1 **Choose** Options.
2 **Choose** Enable Task Swapper to turn it on or off (it is a toggle command). When a diamond appears by the command, it is on.

Start a program
- Use one of three methods to *run* a program described in Exercise 86's "Steps to."

Switch from a program to DOS Shell
- **Press** Ctrl + Esc

Switch from DOS Shell to a program
1 **Select** the program you want which is in the Active Task List.
2 **Press** ↵

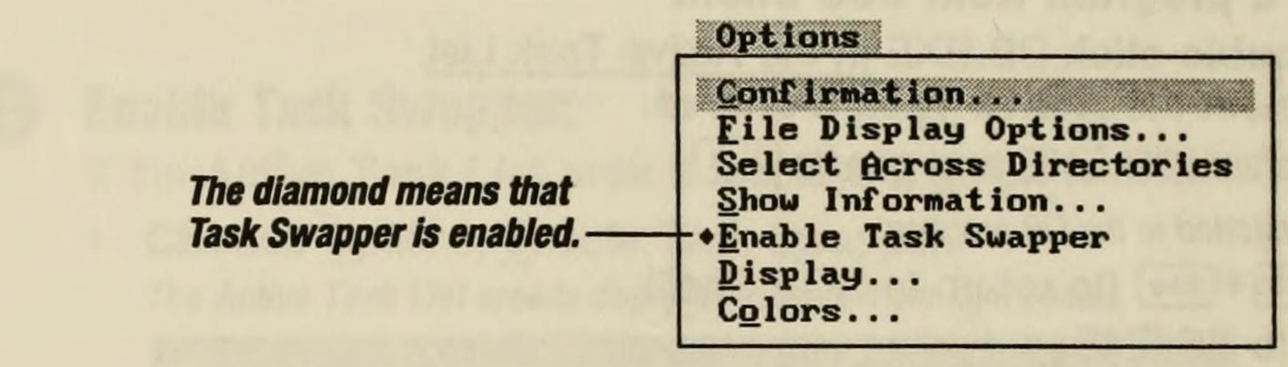
Add a program to the Active Task List
1 **Select** the program you want.
2 **Press** Shift + ↵

Cycle through the open programs
1 **Press** and **hold down** Alt *while* you **tap** Tab
2 **Release** Alt when the program you want appears in the bar.

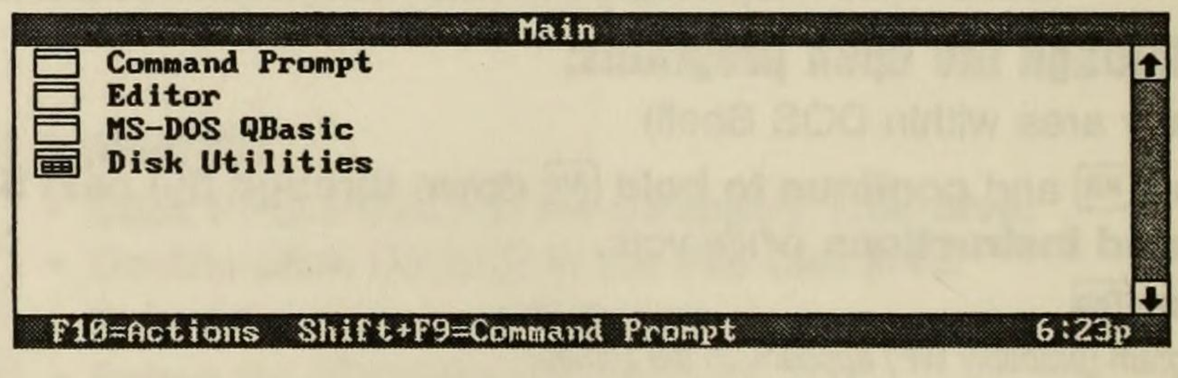
Quit programs
(remove their names from the Active Task List)
1 **Switch** to a program from DOS Shell.
2 **Exit** the program.
You are returned to DOS Shell and the program is removed from the Active Task List.

9 **Exit programs before you exit DOS Shell:**
- If you are in a program now: **press** ↵ (to exit the program) and **press** ↵ again (to return to DOS Shell).
You are returned to DOS Shell, the program is no longer running, and its name is no longer on the Active Task List.
- **Switch** to a program on the Active Task List (review, step 7).
- **Exit** the program by pressing ↵ twice.
You are returned to DOS Shell, the program is no longer running, and its name is no longer on the Active Task List.
- **Continue** *switching* to programs and *exiting* them until the Active Task List is empty.

10 **Disable the Task Swapper:**
- **Select** Options.
The Options menu drops down.



- **Choose** Enable Task Swapper.
Although you cannot see it, the diamond next to Enable Task Swapper disappeared. You ***can*** *see that the Active Task List area has disappeared from DOS Shell.*



11 • **Exit** DOS Shell.

12 • **Go on** to Exercise 88
or **take** the disk out of drive A: and turn the computer off.

EXERCISE 88

Practice

LESSON EIGHT
DOS Shell

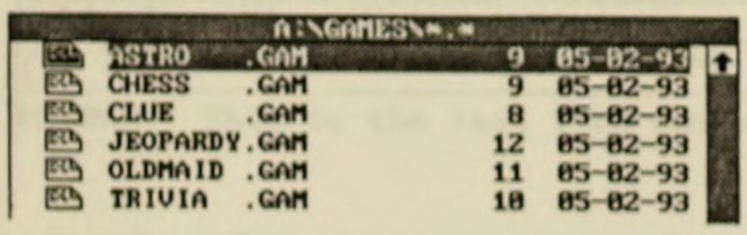
OBJECTIVE:

- review the following tasks from the exercises in Lesson Eight:

  Start DOS Shell
  Change DOS Shell
  Select a drive
  Work with directories
  Change File List display
  Select files

The COMMANDS to perform the steps below are listed in Appendix I. Try to complete the Practice Exercises without looking in the Appendix for help.

1. If necessary, **access** the DUPLICATE Learning Disk on drive A: and **change** to this common DOS prompt: `A:\>`
2. **Start** DOS Shell.
3. **Change** DOS Shell's color scheme to **Emerald City**.
4. **Change** DOS Shell's color scheme back to **Ocean**.
5. **Change** DOS Shell's Display Mode to **Text 25 lines Low Resolution**.
6. **Change** DOS Shell's Display Mode back to **Graphics 25 lines Low Resolution**.
7. **Change** the areas viewed in DOS Shell to **Single File List**.
8. **Change** the areas viewed in DOS Shell to **Program/File Lists**.
9. **Change** to drive C:.
10. **Change** back to drive A:.
11. **Select** the PROGRAMS directory.
12. **Expand** the PROGRAMS directory.
13. **Collapse** the PROGRAMS directory.
14. **Expand** the PROGRAMS directory *branch.*
15. **Expand** *all* directories.
16. **Collapse** the *root* (A:\) directory.
    Only the A:\ (root) directory is displayed.
17. **Expand** the *root* directory (one level).
    A:\ and five subdirectories are displayed.
18. **Create** a directory in the *root* directory; name it TEST.
19. **Delete** the TEST directory.
20. **Select** the GAMES directory.
    These files are displayed in the ***File List area****.*



Exercise 88 continued...

21 **Change** the File Display Options so the *File List area* displays only files that begin with C.

```
A:\GAMES\C*.*
CHESS    .GAM      9  05-02-93
CLUE     .GAM      8  05-02-93
```

22 **Change** the File Display Options so the *File List area* displays *all* files.

23 **Change** the File Display Options so the *File List area* displays files sorted by **Size**.

```
A:\GAMES\*.*
CLUE     .GAM      8  05-02-93
CHESS    .GAM      9  05-02-93
ASTRO    .GAM      9  05-02-93
TRIVIA   .GAM     10  05-02-93
OLDMAID  .GAM     11  05-02-93
JEOPARDY.GAM      12  05-02-93
```

24 **Change** the File Display Options back so that the *File List area* displays files that are sorted by **Name**.
The same files are displayed as those in step 20.

25 **Select** the OLDMAID.GAM file.

```
A:\GAMES\*.*
CLUE     .GAM      8  05-02-93
CHESS    .GAM      9  05-02-93
ASTRO    .GAM      9  05-02-93
TRIVIA   .GAM     10  05-02-93
OLDMAID  .GAM     11  05-02-93
JEOPARDY.GAM      12  05-02-93
```

26 **Select** the *multiple adjoining files* CLUE.GAM *through* OLDMAID.GAM.

```
A:\GAMES\*.*
ASTRO    .GAM      9  05-02-93
CHESS    .GAM      9  05-02-93
CLUE     .GAM      8  05-02-93
JEOPARDY.GAM      12  05-02-93
OLDMAID  .GAM     11  05-02-93
TRIVIA   .GAM     10  05-02-93
```

27 **Select** the *multiple non-adjoining files* CLUE.GAM *and* OLDMAID.GAM.

```
A:\GAMES\*.*
ASTRO    .GAM      9  05-02-93
CHESS    .GAM      9  05-02-93
CLUE     .GAM      8  05-02-93
JEOPARDY.GAM      12  05-02-93
OLDMAID  .GAM     11  05-02-93
TRIVIA   .GAM     10  05-02-93
```

28 **Select** *all* files.

```
A:\GAMES\*.*
ASTRO    .GAM      9  05-02-93
CHESS    .GAM      9  05-02-93
CLUE     .GAM      8  05-02-93
JEOPARDY.GAM      12  05-02-93
OLDMAID  .GAM     11  05-02-93
TRIVIA   .GAM     10  05-02-93
```

29 **Deselect** *all* files.

30 **Exit** DOS Shell.

31 **Go on** to Exercise 89
or **take** the disk out of drive A: and turn the computer off.

EXERCISE 89

Practice

LESSON EIGHT
DOS Shell

OBJECTIVE:

- review the following tasks from the exercises in Lesson Eight:

  Start DOS Shell
  Work with files
  Run a program
  Use Task Swapper

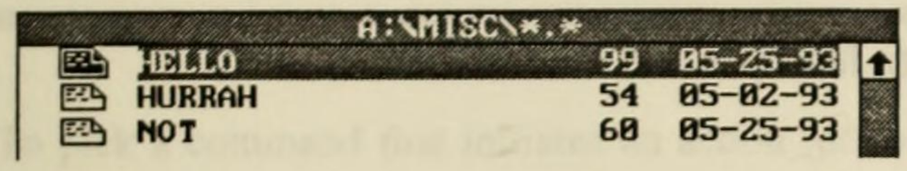
The COMMANDS to perform the steps below are listed in Appendix I. Try to complete the Practice Exercises without looking in the Appendix for help.

1. If necessary, **access** the DUPLICATE Learning Disk on drive A: and **change** to this common DOS prompt: `A:\>`

2. **Start** DOS Shell.

3. **Select** the MISC directory.

   *These files are displayed in the **File List area**.*

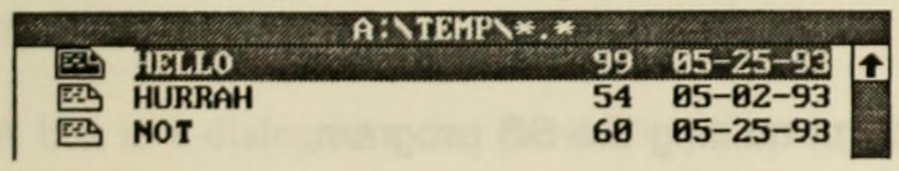


4. **Select** *all* the files in the *File List area*.

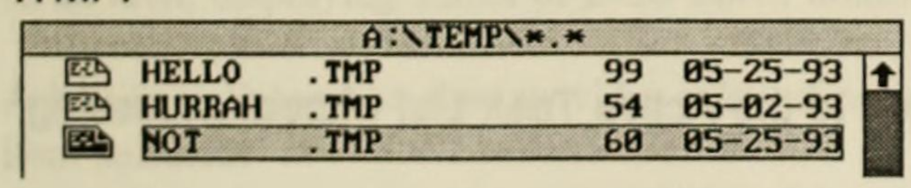
5. **Copy** the files to the TEMP directory.

6. **Select** the TEMP directory.

   *These files are displayed in the **File List area**.*



7. **Rename** the files in the TEMP directory by adding the filename extension .TMP.

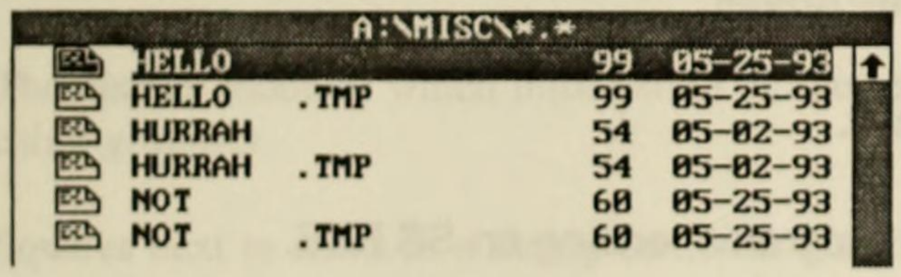


8. **Move** the files in the TEMP directory to the MISC directory.

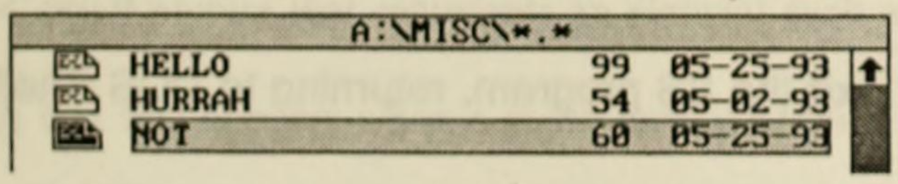
   *The **File List area** message says, "No files in selected directory."*

9. **Select** the MISC directory.

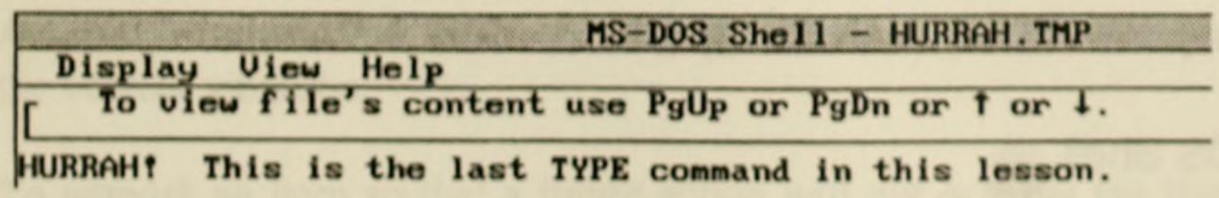
   *These files are displayed in the **File List area**.*



10. **Delete** the files in the MISC directory that end with the extension .TMP.



11. **View** the contents of the HURRAH file.



Exercise 89 continued...

12. **Leave** the view, and **restore** the DOS Shell screen.

13. **Run** the WP.EXE file by using the menu bar's Run command and typing the full path to WP.EXE (including WP.EXE).
The "mock" WP program starts.

14. **Exit** the WP program, returning to DOS Shell.

15. **Select** the PROGRAMS directory.

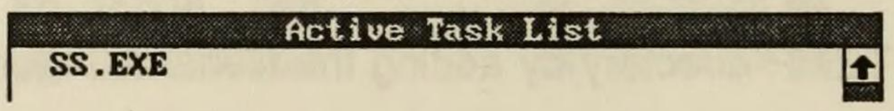
16. **Run** the DB.EXE program file from the *File List* area.
The "mock" DB program starts.

17. **Exit** the DB program, returning to DOS Shell.

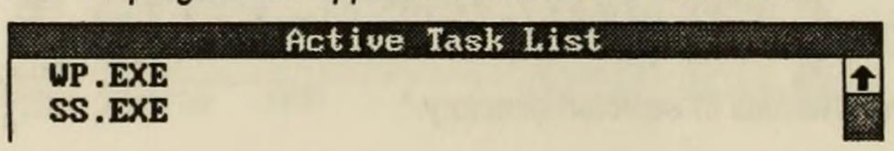
18. **Enable** the Task Swapper.
*The **Active Task List area** appears in the bottom right corner.*

19. **Run** the SS.EXE program file from the *File List* area.
The "mock" SS program starts.

20. **Switch** to DOS Shell without quitting the SS program.
The SS program file appears on the Active Task List.



21. **Add** the WP.EXE program to the Active Task List without accessing the program.
The WP program file appears on the Active Task List.



22. **Switch** to the WP program from DOS Shell (use the Active Task List).
You are switched to the "mock" WP program.

23. **Switch** back to DOS Shell.

24. **Cycle** through the open programs, ending on SS.EXE.

25. **Cycle** through the open programs, ending on DOS Shell.

26. **Switch** to SS.EXE, and **exit** the SS program, returning to DOS Shell.

27. **Switch** to WP.EXE, and **exit** the WP program, returning to DOS Shell.

28. **Disable** (turn off) the Task Swapper.

29. **Exit** DOS Shell.

30. **Go on** to Worksheet 28.
If desired, **take** the disk out of drive A: and turn the computer off.

WORKSHEET 28

NAME _____

TOPIC 15 AND EXERCISES 77, 78, and 79

DIRECTIONS: Use the following terms to fill in the blanks below.

icon	select	text box	check boxes	shortcut keys	command buttons
bars	choose	highlight	text display	option buttons	graphics display
areas	list box	dialog box	mouse pointer	dimmed command	deselect

1. To pick a command that initiates an action (often on a selected item). 1. _____

2. Easy-to-use key combinations that activate certain commands instead of using menus. 2. _____

3. An arrow icon (↖) in *graphics mode* (or a small rectangle (▒) in *text mode*) that moves with the mouse as you slide the mouse over a flat area. 3. _____

4. To pick an area or mark an item so that a subsequent action can have an effect on the item. 4. _____

5. A box in a dialog box that provides space to type the information needed to carry out a command. 5. _____

6. Bands in DOS Shell that perform various functions, such as displaying the title of an area, displaying status of DOS Shell, holding menus, and scrolling lists. 6. _____

7. A box in a dialog box that provides a *list* of options from which an item selected. 7. _____

8. The display mode in which many elements are displayed graphically. 8. _____

9. Circles next to items in a dialog box from which you may select *only one item of a related group*. 9. _____

10. Small boxes that hold a word that will carry out a command when chosen. 10. _____

11. The display mode in which information on the screen is displayed without using *graphics*. 11. _____

12. Squares next to items in a dialog box from which you may select as many items as you want. 12. _____

13. A small picture that represents an element such as a disk drive or directory. 13. _____

14. A box that appears when a *menu command* with an ellipsis (...) is chosen. 14. _____

15. Parts of the DOS Shell screen that display different DOS information. 15. _____

16. A menu command that is shown in gray instead of black and cannot be used in the current situation. 16. _____

17. To *unmark* an item so that a future action will not *activate* the item. 17. _____

18. To indicate that an object is *selected* by changing its color. 18. _____

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WORKSHEET 29

NAME _____

EXERCISES 82, 84, 86, and 87

DIRECTIONS: Use the following terms to fill in the blanks below.

Task Swapper	program file	Program List area	collapse directories
data file	program group	select directories	expand all directories
program item	directory icon	expand directories	expand directory branch

1. To hide directory levels. 1. _____

2. To highlight directories. 2. _____

3. A file that consists of data created in a program, such as a *letter* typed in a word processor. 3. _____

4. To display the unseen subdirectories of the *selected* directory. 4. _____

5. To display all the directories on the disk. 5. _____

6. A file that holds a set of instructions that perform a task, such as a word processor. 6. _____

7. The area of DOS Shell that is designed with features that let you organize *program files* (called *program items*) into groups (called *program groups*). 7. _____

8. A *program file* listed in the *Program List area*. 8. _____

9. To display all directory levels under the *selected* directory. 9. _____

10. A DOS Shell feature that lets you run two or more programs at the same time and switch between them. 10. _____

11. The small picture of a file folder next to a directory name. 11. _____

12. A name in the *Program List area* which opens a list of additional programs that are not displayed originally. 12. _____

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WORKSHEET 30

NAME _____

LESSON EIGHT, Questions — getting to know DOS Shell

1. List the five areas that are possible in DOS Shell.

1. 1)_____
   2)_____
   3)_____
   4)_____
   5)_____

2. List the two display modes in DOS Shell.

2. 1)_____
   2)_____

3. List two ways to perform actions in DOS Shell.

3. 1)_____
   2)_____

4. List three mouse actions.

4. 1)_____
   2)_____
   3)_____

5. What is it called when you pick an area (or mark an item) so that a subsequent action can have an effect on the item?

5. _____

6. What is it called when you pick a command that initiates an action?

6. _____

7. Can you *select* an *area* in DOS Shell when the area is empty?

7. _____

8. List the five methods dialog boxes use to request additional information.

8. 1)_____
   2)_____
   3)_____
   4)_____
   5)_____

9. Is the *File* menu different for some of the *areas* in DOS Shell?

9. _____

10. What menu offers options to change DOS Shell's color scheme and display mode?

10. _____

11. What menu offers options to change the *areas* viewed in DOS Shell?

11. _____

12. What menu offers options to enable or disable the Task Swapper?

12. _____

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WORKSHEET 31

NAME _____

LESSON EIGHT, Questions — using DOS Shell

1. When you select a directory, where are the files in that directory (if there are any) displayed? 1. _____

2. What symbol appears in the *directory file icon* (📁) of a directory that can be *expanded* (i.e., when the directory has subdirectories that are not showing)? 2. _____

3. What symbol appears in the *directory file icon* (📁) of a directory that can be *collapsed* (i.e., when the directory has subdirectories that can be hidden)? 3. _____

4. What *menu* must be used by the mouse (and may be used from the keyboard) to *expand a directory branch* or *expand all directories*? 4. _____

5. What *menu* do you use to *create* a new directory? 5. _____

6. What *menu* do you use to display specific files, for example, files ending with .EXE? 6. _____

7. What *menu* do you use to change the sort order of the files? 7. _____

8. What must you *do* to files before you can perform any action on them, such as copy or delete? 8. _____

9. Can you select multiple files that are not adjoining? 9. _____

10. What *menu* do you use to *select all files* or *deselect all files*? 10. _____

11. List four actions you can perform on *selected* files. 11. 1)_____

2)_____

3)_____

4)_____

12. What *menu* must be used by the mouse (and may be used from the keyboard) to *view a file's contents* (similar to the TYPE command)? 12. _____

13. What *menu* <u>*and*</u> *command* do you use to return to DOS Shell after you *view a file's contents*? 13. _____

14. What are program files that are displayed in the *Program List area* called? 14. _____

15. What are names in the *Program List area* that open a list of programs currently not displayed? 15. _____

16. Can you *run* a program from the *File List area*? 16. _____

17. What *menu* can you use to *run* a file? 17. _____

18. What DOS Shell feature lets you *run* more than one program and *switch* between them? 18. _____

19. What *menu* do you use to *enable (or disable) the Task Swapper*? 19. _____

20. What keystroke combination do you use to *switch* from a program to DOS Shell? 20. _____

21. What keystroke combination do you use to *cycle through the open programs*? 21. _____

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Appendixes

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Appendix A – DOS Commands and Definitions

This is a list of MS-DOS® commands and short definitions compiled from HELP (MS-DOS 5.0) and FASTHELP (MS-DOS 6.0). Commands with a 5 by them are available to DOS 5 users only, and commands a 6 by them are available to DOS 6 users only. **The Commands below which are bolded and have an asterisk by them are covered in this book.**

APPEND		Allows programs to open data files in specified directories as if they were in the current directory.
ASSIGN	5	Redirects requests for disk operations on one drive to a different drive.
ATTRIB		Displays or changes file attributes.
BACKUP	5	Backs up one or more files from one disk to another.
BREAK		Sets or clears extended CTRL+C checking.
CALL		Calls one batch program from another.
***CD**		**Displays the name of or changes the current directory.**
CHCP		Displays or sets the active code page number.
CHDIR		Displays the name of or changes the current directory.
***CHKDSK**		**Checks a disk and displays a status report.**
***CLS**		**Clears the screen.**
COMMAND		Starts a new instance of the MS-DOS command interpreter.
COMP		Compares the contents of two files or sets of files.
***COPY**		**Copies one or more files to another location.**
CTTY		Changes the terminal device used to control your system.
***DATE**		**Displays or sets the date.**
DBLSPACE	6	Sets up or configures DoubleSpace compressed drives.
DEBUG		Runs Debug, a program testing and editing tool.
DEFRAG	6	Reorganizes the files on a disk to optimize the disk.
***DEL**		**Deletes one or more files.**
DELOLDOS	6	Deletes the OLD_DOS.1 directory and the files it contains.
***DELTREE**	6	**Deletes a directory and all the files and subdirectories in it.**
***DIR**		**Displays a list of files and subdirectories in a directory.**
DISKCOMP		Compares the contents of two floppy disks.
***DISKCOPY**		**Copies the contents of one floppy disk to another.**
DOSKEY		Edits command lines, recalls MS-DOS commands, and creates macros.
***DOSSHELL**		**Starts MS-DOS Shell.**
***ECHO**		**Displays messages, or turns command echoing on or off.**
***EDIT**		**Starts MS-DOS Editor, which creates and changes ASCII files.**
EDLIN	5	Starts Edlin, a line-oriented text editor.
EMM386		Turns on or off EMM386 expanded memory support.
ERASE		Deletes one or more files.
EXE2BIN	5	Converts .EXE (executable) files to binary format.
EXIT		Quits the COMMAND.COM program (command interpreter).
EXPAND		Expands one or more compressed files.
***FASTHELP**	6	**Provides summary Help information for MS-DOS commands.**
FASTOPEN		Decreases the amount of time needed to open frequently used files and directories.
FC		Compares two files or sets of files, and displays the differences between them.
FDISK		Configures a hard disk for use with MS-DOS.
FIND		Searches for a text string in a file or files.
FOR		Runs a specified command for each file in a set of files.
***FORMAT**		**Formats a disk for use with MS-DOS.**
GOTO		Directs MS-DOS to a labelled line in a batch program.
GRAFTABL	5	Enables MS-DOS to display an extended character set in graphics mode.
GRAPHICS		Loads a program that can print graphics.
***HELP**	5	**Provides Help information for MS-DOS commands.**
***HELP**	6	**Provides complete, interactive Help information for MS-DOS commands.**

IF		Performs conditional processing in batch programs.
INTERLNK	6	Connects two computers via parallel or serial ports.
INTERSVR	6	Starts the InterInk server.
JOIN	5	Joins a disk drive to a directory on another drive.
KEYB		Configures a keyboard for a specific language.
***LABEL**		**Creates, changes, or deletes the volume label of a disk.**
LH		Loads a program into the upper memory area.
LOADFIX		Loads a program above the first 64K of memory, and runs the program.
LOADHIGH		Loads a program into the upper memory area.
***MD**		**Creates a directory.**
MEM		Displays the amount of used and free memory in your system.
MEMMAKER	6	Starts the Memmaker program, which optimizes your computer's memory.
MIRROR	5	Records information about one or more disks.
MKDIR		Creates a directory.
MODE		Configures a system device.
***MORE**		**Displays output one screen at a time.**
***MOVE**	**6**	**Moves one or more files. Also renames files and directories.**
MSAV	6	Scans your computer for known viruses.
MSBACKUP	6	Backs up or restores one or more files from one disk to another.
MSD	6	Provides detailed technical information about your computer.
NLSFUNC		Loads country-specific information.
***PATH**		**Displays or sets a search path for executable files.**
***PAUSE**		**Suspends processing of a batch file and displays a message.**
POWER	6	Turns power management on and off.
PRINT		Prints a text file while you are using other MS-DOS commands.
***PROMPT**		**Changes the MS-DOS command prompt.**
QBASIC		Starts the MS-DOS QBasic programming environment.
***RD**		**Removes a directory.**
RECOVER	5	Recovers readable information from a bad or defective disk.
***REM**		**Records comments (remarks) in batch files or CONFIG.SYS.**
***REN**		**Renames a file or files.**
RENAME		Renames a file or files.
REPLACE		Replaces files.
RESTORE		Restores files that were backed up by using the BACKUP command.
RMDIR		Removes a directory.
SET		Displays, sets, or removes MS-DOS environment variables.
SETVER		Sets the version number that MS-DOS reports to a program.
SHARE		Installs file-sharing and locking capabilities on your hard disk.
SHIFT		Shifts the position of replaceable parameters in batch files.
SORT		Sorts input.
SUBST		Associates a path with a drive letter.
***SYS**		**Copies MS-DOS system files and command interpreter to a disk you specify.**
***TIME**		**Displays or sets the system time.**
***TREE**		**Graphically displays the directory structure of a drive or path.**
***TYPE**		**Displays the contents of a text file.**
***UNDELETE**		**Recovers files which have been deleted.**
UNFORMAT		Restores a disk erased by the FORMAT command or restructured by the RECOVER command.
***VER**		**Displays the MS-DOS version.**
VERIFY		Tells MS-DOS whether to verify that your files are written correctly to a disk.
***VOL**		**Displays a disk volume label and serial number.**
VSAFE	6	Continuously monitors your computer for viruses.
***XCOPY**		**Copies files (except hidden and system files) and directory trees.**

Appendix B – Common DOS Error Messages

Abort, Retry, Fail

This message appears with another message above it that gives more information about the specific problem; for example, **Not ready reading drive X** (see below).

CAUSE: You have given DOS a command involving a disk drive that the computer cannot perform.

SOLUTION:
- Correct the problem, if possible, and press [R] to *retry* or
- press [F] (fail) and then type a drive letter that is working, such as C:, and then press [↵]

Bad command or file name

CAUSE: You either misspelled a command or file name, or DOS could not find the command or file name, that is, it was not in the *current* disk, directory, or search path.

SOLUTION:
- Check the spelling of the command or file name,
- change to the correct directory and try the command again, or
- enter the correct path to the command or file name along with the command or file name.

Directory already exists

CAUSE: You used the MD (make directory) command to create either a directory that already exists or a directory whose name is the same name as a filename in the directory.

SOLUTION:
- Use DIR or TREE to check the names of directories and filenames, and then use a name that is different when you try to create a new directory.

Duplicate file name or file not found

CAUSE: You used RENname to rename a file to a filename that already exists, or DOS cannot find the file you want to rename.

SOLUTION:
- Rename the file to an unused filename or
- use the correct name of the file to be renamed.

File not found

CAUSE: Either you misspelled a filename, or DOS could not find the file, that is, the file was not on the disk or in the directory you specified, or in the search path.

SOLUTION:
- Check the filename to be sure it is spelled correctly, or
- check the current directory, or the path to the desired file, or
- see Exercise 34 (Find files) for directions to search all directories for the file you want to find.

General failure reading drive X (where X represents the disk drive you tried to access)

Abort, Retry, Fail

CAUSE: You tried to change to a disk that either is not formatted or is damaged.

SOLUTION:
- Put a formatted disk in the drive and press [R] to retry, or
- press [F] (fail) and then type a drive letter that is working, such as C:, and then press [↵]

Insufficient disk space

CAUSE: You tried to save a file that is bigger than the amount of space remaining on the disk.

SOLUTION:
- Delete unnecessary files from the disk and try to save the file again, or
- save the file on a different disk.

Non-system disk or disk error

CAUSE: You turned the computer on when there was a *non-system* disk in drive A:. If there is a disk in drive A: when you turn the computer on, DOS tries to boot the computer with that disk.

SOLUTION:
- Remove the disk from drive A: and press any key to continue or,
- if you want to boot the computer from drive A:, replace the *non-system* disk with a *system* disk and press any key to continue.

Not ready reading drive X (where X represents the disk drive you tried to access) Abort, Retry, Fail

CAUSE: You changed to a drive without a disk in it or the disk drive's latch was not closed.

SOLUTION:
- Put a disk in the disk drive, if necessary, and/or close the disk drive's latch, and then press R to *retry* or
- press F (fail) and then type a drive letter that is working, such as C:, and then press ↵

Required parameter missing

CAUSE: You left out one of the parameters that the DOS command requires (see Topic 11, page 80).

SOLUTION:
- Use HELP or FASTHELP (or some other reference source) to check the required parameters of the DOS command you are using, and try the command again using the correct parameters. Sometimes a little experimenting will help you find a solution.

Syntax error

CAUSE: Some of your command parts were typed in the wrong order.

SOLUTION:
- Use HELP (DOS 5) or FASTHELP (DOS 6), or some other reference source, to check the correct order of the parts of the DOS command you are using, and try the command again using the correct order.

Unable to create directory

CAUSE: You tried to create a directory with a name that matches a filename in the directory or you used a path in the MD command that is not valid.

SOLUTION:
- Use a different directory name—use DIR to check for filenames that may match the name you want to give your directory and/or
- use the TREE command to check your directory structure and determine the correct path for the directory you want to make.

Appendix C – DOS Commands, Categorized

Coded to indicate which of the following categories each command fits into.

5 = DOS 5 **I** = internal command **B** = batch file command
6 = DOS 6 **E** = external command **C** = config.sys command

command	5	6	I	E	B	C
A						
APPEND	5	6		E		
ASSIGN	5			E		
ATTRIB	5	6		E		
B						
BACKUP	5			E		
BREAK	5	6				C
BUFFERS		6				C
C						
CALL	5	6	I		B	
CD	5	6	I			
CHCP	5	6		E		
CHDIR	5		I			
CHKDSK	5	6		E		
CHOICE		6		E	B	
CLS	5	6	I			
COMMAND	5	6		E		
COMP	5	6		E		
COPY	5	6	I			
COUNTRY		6	I			
CTTY	5	6	I			
D						
DATE	5	6	I			
DBLSPACE		6		E		
DEBUG	5	6		E		
DEFRAG		6		E		
DEL	5	6	I			
DELOLDOS		6		E		
DELTREE		6		E		
DEVICE		6				C
DEVICEHIGH		6				C
DIR	5	6	I			
DISKCOMP	5	6		E		
DISKCOPY	5	6		E		
DOS		6				C
DOSKEY	5	6	I			
DOSSHELL	5	6		E		
DRIVPARM		6				C
E						
ECHO	5	6	I		B	
EDIT	5	6		E		
EDLIN	5			E		
EMM386	5	6		E		
ERASE	5	6	I			
EXE2BIN	5			E		
EXIT	5	6	I			
EXPAND	5	6		E		

command	5	6	I	E	B	C
F						
FASTHELP		6		E		
FASTOPEN	5	6		E		
FC	5	6		E		
FCBS		6				C
FDISK	5	6		E		
FILES		6				C
FIND	5	6		E		
FOR	5	6	I		B	
FORMAT	5	6		E		
G						
GOTO	5	6	I		B	
GRAFTABL	5			E		
GRAPHICS	5	6		E		
H						
HELP	5	6		E		
I						
IF	5	6	I		B	
INCLUDE		6				C
INSTALL		6				C
INTERLINK		6		E		
INTERSVR		6		E		
J						
JOIN	5			E		
K						
KEYB	5	6		E		
L						
LABEL	5	6		E		
LASTDRIVE		6				C
LH	5	6	I			
LOADFIX	5	6		E		
LOADHIGH	5	6	I			
M						
MD	5	6	I			
MEM	5	6		E		
MEMMAKER		6		E		
MENUCOLOR		6				C
MENUDEFAULT		6				C
MENUITEM		6				C
MIRROR	5			E		
MKDIR	5		I			
MODE	5	6		E		
MORE	5	6		E		
MOVE		6		E		
MSAV		6	I			
MSBACKUP		6		E		
MSD		6		E		

command	5	6	I	E	B	C
N						
NLSFUNC	5	6		E		
NUMLOCK		6				C
P						
PATH	5	6	I			
PAUSE	5	6	I		B	
POWER		6		E		
PRINT	5	6		E		
PROMPT	5	6	I			
Q						
QBASIC	5	6		E		
R						
RD	5	6	I			
RECOVER	5			E		
REM	5	6			B	C
REN	5	6	I			
RENAME	5		I			
REPLACE	5	6		E		
RESTORE	5	6		E		
RMDIR	5		I			
S						
SET	5	6	I			
SETVER	5	6		E		
SHARE	5	6		E		
SHELL		6				C
SHIFT	5	6			B	
SMARTDVR		6		E		
SORT	5	6		E		
STACKS		6				C
SUBMENU		6				C
SUBST	5	6		E		
SWITCHES		6				C
SYS	5	6		E		
T						
TIME	5	6	I			
TREE	5	6		E		
TRUENAME		6	I			
TYPE	5	6	I			
U						
UNDELETE	5	6		E		
UNFORMAT	5	6		E		
V						
VER	5	6	I			
VERIFY	5	6	I			
VOL	5	6	I			
VSAFE		6		E		
X						
XCOPY	5	6		E		

Appendix D – MS-DOS 6.2 Changes

(the changes that affect some exercises in this book)

File overwrite protection

When using the MOVE, COPY, or XCOPY command, DOS 5.0 and 6.0 will overwrite files with the same name as those you are copying or moving; **MS-DOS 6.2** warns you before overwriting files with the same name.

For example, if you try to *copy* a file named JONES.DOC to a directory named LETTERS on a disk in drive A: that already contained a file named JONES.DOC, **MS-DOS 6.2** will display this message:

```
Overwrite A:\LETTERS\JONES.DOC (Yes/No/All)?
```

Commas

While DOS 5.0 and 6.0 do *not* display commas in the output created by the DIR, MEM, CHKDSK, and FORMAT commands, **MS-DOS 6.2** displays commas in all numbers greater than one thousand.

DOS 5.0 and 6.0 DIR output does not use commas

```
 Volume in drive A is LEARNING
 Volume Serial Number is XXXX-XXXX
 Directory of A:\PROGRAMS

.            <DIR>      05-22-93   8:41p
..           <DIR>      05-22-93   8:41p
CLS      DAT         290 04-22-93   4:05p
OPENING  DAT         319 04-22-93   4:05p
CD       DAT         479 04-22-93   3:57p
SHOWME   BAT         139 09-22-93   8:08p
DB       EXE       31458 04-22-93   3:21p
SS       EXE       31374 04-22-93   3:06p
WP       EXE       31426 04-22-93   3:10p
DATA         <DIR>      05-22-93   8:43p
      10 file(s)      95485 bytes
                   10193536 bytes free
```

***MS-DOS 6.2** DIR output uses commas*

```
 Volume in drive A is LEARNING
 Volume Serial Number is XXXX-XXXX
 Directory of A:\PROGRAMS

.            <DIR>      05-22-93   8:41p
..           <DIR>      05-22-93   8:41p
CLS      DAT         290 04-22-93   4:05p
OPENING  DAT         319 04-22-93   4:05p
CD       DAT         479 04-22-93   3:57p
SHOWME   BAT         139 09-22-93   8:08p
DB       EXE      31,458 04-22-93   3:21p
SS       EXE      31,374 04-22-93   3:06p
WP       EXE      31,426 04-22-93   3:10p
DATA         <DIR>      05-22-93   8:43p
      10 file(s)      95,485 bytes
                   10,193,536 bytes free
```

No-swap DISKCOPY

When using the DISKCOPY command, DOS 5.0 and 6.0 require you to switch the *source* and *target* disks if you are copying a disk with a capacity greater than 360K. But, because **MS-DOS 6.2** uses *hard disk space* when copying floppy disks, it does *not* require multiple disk swaps, even with disks that have capacities greater than 360K.

DOS Shell has been removed

Because so many people use the File Manager program in Windows instead of DOS Shell, Microsoft has removed DOSSHELL from **MS-DOS 6.2** and has placed it on the **MS-DOS 6.2** Supplemental Disk. If you do not have DOSSHELL, you cannot do Lesson Eight in this book.

Appendix E – DOS Commands and Tasks with Definitions

LESSON ONE

Disk drives (p. 14) Mechanical devices that store and retrieve information on disks.

Access the DOS prompt (p. 15) To turn on the computer and display the DOS prompt on the hard disk.

Change drives (p. 16) Makes a different disk drive active.

CLS (p. 18) Removes all the information from the screen and displays a new DOS prompt at the top of the screen.

PROMPT (p. 19) Changes the appearance of the DOS prompt.

VER (p. 20) Displays DOS's name and version number.

LESSON TWO

DIR (directory) (p. 30) Displays a list of files and/or directories within a directory.

DIR and switches (p. 31) To change the way DOS *normally* displays the contents of a directory by adding a *switch* to the end of the DIR command.

DIR and switches with options (p. 33) To vary the way a *switch* changes the DIR command by adding an *option* at the end of the switch.

DIR and wildcards (p. 34) To use *wildcards* with the DIR command to identify and list certain *groups of files* within a directory.

Redirect output to the printer (p. 35) To use a code which tells DOS to send the *output* of your command to the *printer* rather than the *screen.*

TREE (p. 38) Displays the directory structure on a disk.

CD (change directory) (p. 40) Changes directories or displays the *current* directory.

More DIR (p. 43) This exercise combines the DIR command with different *paths* and *drives* to let you examine any directory on any disk drive in your computer system.

LESSON THREE

DISKCOPY (p. 56) Copies the entire contents of a floppy disk (the *source* disk) onto another floppy disk (the *target* disk).

COPY a file to the same directory (p. 58) COPY is the DOS command that duplicates a file (or files). When you copy a file to the same directory as the original file, you *must* give the duplicate file a new filename.

LESSON THREE (continued)

COPY a group of files to the same directory (p. 59) COPY is the DOS command that duplicates a file (or files). When you copy *multiple* files to the same directory as the original files, you *must* give the duplicate files new filenames.

COPY files to different directories (p. 60) COPY is the DOS command that duplicates a file (or files). When you copy files to *different directories* you have a choice of either *keeping the original filenames* or *renaming* the duplicate files.

DEL (delete) (p. 62) Removes files from a disk.

UNDELETE (p. 64) Restores files that have been deleted.

REN (rename) (p. 65) Changes a file's name.

MOVE **DOS 6 only** (p. 66) *Moves files* from one directory to another directory or *renames directories.*

TYPE (p. 68) Displays the contents of a file.

FORMAT (p. 69) The DOS command that prepares a disk for use by the computer.

LESSON FOUR

FASTHELP **DOS 6 only** (p. 82) Provides *fast* information about DOS commands.

HELP **DOS 5** (p. 83) Provides information about DOS commands.

HELP **DOS 6** (p. 84) Starts the Help program that provides thorough help with DOS commands.

CHKDSK (p. 86) Gives you information about your disk and your computer's memory.

Find files (DIR/S) (p. 87) Locate files when you know the filename but do not know what directory they are in.

Cancel a command (CTRL + C) (p. 88) Stop DOS from completing a command.

Repeat a command (F3) (p. 89) Use F3 to quickly reproduce the previous DOS command.

Correct a command (F1) (p. 90) Use F1 to repeat the previous command – one character at a time – and replace, insert, or delete one or more characters.

Run a program (p. 93) Load a program into the computer's memory and start it.

DATE (p. 95) Displays or changes the computer's date.

TIME (p. 96) Displays or changes the computer's time.

VOL (p. 97) Displays the disk's volume label and serial number, if there is one.

LABEL (p. 98) Creates, changes or removes a disk's name (volume label).

LESSON FIVE

Empty the root directory (p. 110) Transfer all the files from the root directory to other directories.

MD (make directory) (p. 113) Creates a directory.

Transfer files (p. 114) Move files from one directory to another directory and remove the files from the original directory.

RD (remove directory) (p. 118) Deletes a directory.

XCOPY (p. 120) Copies all the files (except hidden and system files) in a directory or in an entire directory branch.

DELTREE **DOS 6 only** (p. 124) Deletes a directory and all the files and subdirectories within it.

Delete directory **DOS 5 only** (p. 126) Delete a directory and all the files and subdirectories within it.

Print contents of disk (p. 128) Print all the directories and their files by issuing this command from the root directory: DIR/S>PRN.

LESSON SIX

Start DOS Editor (p. 137) To issue the command that begins the DOS Editor program.

Use the menu bar (p. 138) To select and cancel a menu on the menu bar and to choose a command from a menu.

Use dialog boxes (p. 140) To use various methods to specify information in dialog boxes.

Create a text file (p. 144) To type text in DOS Editor.

Print a text file (p. 145) To print a copy of the text in the DOS Editor editing window.

Save a text file (p. 146) To store the text in DOS Editor on a disk.

Open a text file (p. 147) To retrieve a text file into DOS Editor.

Move the cursor (p. 149) To position the cursor at various locations in the editing window using the keyboard or the mouse.

Select text (p. 152) To use the keyboard or mouse to highlight text in the editing window.

Edit text (p. 154) To insert, replace, cut, copy, paste, and delete text.

Find text (p. 156) To search for specific text in a text file.

LESSON SEVEN

Create a simple batch file (p. 167) Use DOS Editor to type a three-line batch file.

PATH (p. 168) Sets a search path in the computer's memory.

ECHO (p. 170) Used mainly in *batch files* to turn the *command echoing* feature on or off, or display a message.

PAUSE (p. 171) Temporarily stops a batch file and prompts the user to press any key to continue.

Create a batch file that uses data files (p. 172)

Create a batch file that backs up files (p. 176)

Delete batch files (p. 177)

Terminate a batch file (p. 178) End a batch file before all the commands in it are executed.

Create AUTO.BAT (p. 178) Create a batch file on a floppy disk that mimics the AUTOEXEC.BAT file on the hard disk.

SYS (p. 180) Copies DOS *system files* and COMMAND.COM to a disk you specify, making it a *system (bootable) disk.*

LESSON EIGHT

Start DOS Shell (p. 194) Issue the command to start the DOS Shell program.

Select areas (p. 195) Move to different areas in the DOS Shell screen, causing that area's title bar (or drive icon) to be highlighted.

Use the menus (p. 196) To select and cancel a menu on the menu bar, and to choose a command from a menu.

Use dialog boxes (p. 198) Use various methods to specify information in a dialog box.

Change DOS Shell (p. 201) Change screen colors, areas viewed, and the display; and enable/disable the Task Swapper.

Select a drive (p. 202) Make a different disk drive active.

Work with directories (p. 203) Select a directory, collapse and expand directories, and create and delete directories.

Change File List display (p. 206) View specific files and change the way files are sorted.

Select files (p. 207) Highlight a file or multiple files so you can perform an action on them.

Work with files (p. 209) Move, copy, delete, and rename files; and view the contents of a file.

Run a program (p. 212) To use different methods to start programs from DOS Shell.

Use Task Swapper (p. 214) To enable Task Swapper, start several programs, and switch between them.

Appendix F – Log of STEPS to Perform DOS Tasks

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Appendix H – Miscellaneous Exercise Solutions

LESSON TWO

EXERCISE 13 (page 39)
STEP 3

1. \FOOD\VEGGIES
2. \PROGRAMS\DATA
3. \ or A:. or A:\
4. GAMES, FOOD, PROGRAMS, BAK
5. VEGGIES, GOODIES
6. GAMES, FOOD, VEGGIES, GOODIES, PROGRAMS, DATA, BAK

LESSON THREE

EXERCISE 20 (page 59)
STEP 3

```
 Volume in drive A is LEARNING
 Volume Serial Number is XXXX-XXXX
 Directory of A:\

GAMES          <DIR>      05-02-93   7:46p
FOOD           <DIR>      05-02-93   7:46p
PROGRAMS       <DIR>      05-22-93   8:41p
JONES     LET              9 05-02-93   7:48p
BAK            <DIR>      05-22-93   8:43p
SMITH     LET              9 05-02-93   8:13p
LOPEZ     LET              9 05-02-93   8:13p
LETTER1                    7 05-02-93   8:15p
REPORT3                    7 05-02-93   8:16p
LETTER2                    7 05-02-93   8:16p
CLUE      GAM              8 05-02-93   8:17p
CORN      VEG              8 05-02-93   8:17p
RADISH    VEG             10 05-02-93   8:17p
POTATOES  VEG             12 05-02-93   8:18p
PUDDING   DES             11 05-02-93   8:19p
LOPEZ     RPT              9 05-02-93   8:19p
REPORT1                    7 05-02-93   8:20p
SMITH     RPT              9 05-02-93   8:20p
SMITH     MEM              9 05-02-93   8:20p
TRIVIA    GAM             10 05-02-93   8:21p
MEMO3                      5 05-02-93   8:21p
LOPEZ     MEM              9 05-02-93   8:21p
LETTER3                    7 05-02-93   8:22p
JONES     MEM              9 05-02-93   8:22p
JONES     RPT              9 05-02-93   8:23p
JELLO     DES              9 05-02-93   8:23p
OLDMAID   GAM             11 05-02-93   8:23p
MEMO1                      5 05-02-93   8:24p
MEMO2                      5 05-02-93   8:24p
REPORT2                    7 05-02-93   8:25p
HELLO                     99 05-25-93   9:36p
HURRAH                    54 05-02-93   8:40p
NOT                       60 05-25-93   9:37p
JONES     BAK              9 05-02-93   7:48p
CLUE      BAK              8 05-02-93   8:17p
TRIVIA    BAK             10 05-02-93   8:21p
OLDMAID   BAK             11 05-02-93   8:23p
      37 file(s)          468 bytes
                        XXXXXX bytes free
```

LESSON THREE

EXERCISE 25 (page 67)
STEP 6

```
 Volume in drive A is LEARNING
 Volume Serial Number is XXXX-XXXX
 Directory of A:\

GAMES          <DIR>      05-02-93   7:46p
FOOD           <DIR>      05-02-93   7:46p
PROGRAMS       <DIR>      05-22-93   8:41p
JONES     LET              9 05-02-93   7:48p
BAK            <DIR>      05-22-93   8:43p
SMITH     LET              9 05-02-93   8:13p
LOPEZ     LET              9 05-02-93   8:13p
LETTER1                    7 05-02-93   8:15p
REPORT3                    7 05-02-93   8:16p
LETTER2                    7 05-02-93   8:16p
CLUE      GAM              8 05-02-93   8:17p
CORN      VEG              8 05-02-93   8:17p
RADISH    VEG             10 05-02-93   8:17p
POTATOES  VEG             12 05-02-93   8:18p
PUDDING   YUM             11 05-02-93   8:19p
LOPEZ     RPT              9 05-02-93   8:19p
REPORT1                    7 05-02-93   8:20p
SMITH     RPT              9 05-02-93   8:20p
SMITH     MEM              9 05-02-93   8:20p
TRIVIA    GAM             10 05-02-93   8:21p
LETTER3                    7 05-02-93   8:22p
JONES     MEM              9 05-02-93   8:22p
JONES     RPT              9 05-02-93   8:23p
GEL       YUM              9 05-02-93   8:23p
OLDMAID   GAM             11 05-02-93   8:23p
REPORT2                    7 05-02-93   8:25p
HELLO                     99 05-25-93   9:36p
HURRAH                    54 05-02-93   8:40p
NOT                       60 05-25-93   9:37p
JONES     BAK              9 05-02-93   7:48p
CLUE      BAK              8 05-02-93   8:17p
TRIVIA    BAK             10 05-02-93   8:21p
OLDMAID   BAK             11 05-02-93   8:23p
      33 file(s)          444 bytes
                        XXXXXX bytes free
```

LESSON FIVE

EXERCISE 44 (page 111)
STEP 3

DOS 6 *and* DOS 5:

- **Type** DIR *.DES ↵

DOS 6 only:

- **Type** MOVE *.DES \FOOD\GOODIES ↵
- **Type** DIR *.DES ↵
- **Type** DIR \FOOD\GOODIES*.DES ↵

DOS 5 only:

- **Type** COPY *.DES \FOOD\GOODIES ↵
- **Type** DIR \FOOD\GOODIES*.DES ↵
- **Type** DEL *.DES ↵
- **Type** DIR *.DES ↵

LESSON FIVE

EXERCISE 44 (page 111)
STEP 4

DOS 6 *and* DOS 5:

- **Type** DIR *.GAM ↵

DOS 6 only:

- **Type** MOVE *.GAM \GAMES ↵
- **Type** DIR *.GAM ↵
- **Type** DIR \GAMES*.GAM ↵

DOS 5 only:

- **Type** COPY *.GAM \GAMES ↵
- **Type** DIR \GAMES*.GAM ↵
- **Type** DEL *.GAM ↵
- **Type** DIR *.GAM ↵

LESSON FIVE

EXERCISE 44 (page 111)
STEP 5

DOS 6 *and* DOS 5:

- **Type** DIR ↵

DOS 6 only:

- **Type** MOVE *.* \PROGRAMS\DATA ↵
- **Type** DIR \PROGRAMS\DATA ↵

DOS 5 only:

- **Type** COPY *.* \PROGRAMS\DATA ↵
- **Type** DIR \PROGRAMS\DATA ↵
- **Type** DEL *.* ↵; Y ↵

DOS 6 *and* DOS 5:

- **Type** DIR ↵

LESSON FIVE

EXERCISE 46 (page 116)
STEP 5

You should be in the DATA directory with this prompt showing: A:\PROGRAMS\DATA
Remember that you do not want to move the REPORTS.DOC file to the REPORTS directory (it will be moved to the WP directory with other .DOC files later).

DOS 6 *and* DOS 5:

- **Type** DIR REPORT?. ↵
  (to list files, except REPORT.DOC, that begin with REPORT).
- **Type** DIR *.RPT ↵
  (to list files that with RPT).

DOS 6 only:

- **Type** MOVE REPORT? REPORTS ↵
  (to MOVE files, except REPORT.DOC, that begin with REPORT to the REPORTS directory).
- **Type** MOVE *.RPT REPORTS ↵
  (to MOVE files that end with RPT to the REPORTS directory).
- **Type** DIR\REPORTS ↵
  (to list files in the REPORTS directory).

DOS 5 only:

- **Type** COPY REPORT? REPORTS ↵
  (to COPY files, except REPORT.DOC, that begin with REPORT to the REPORTS directory).
- **Type** (COPY *.RPT REPORTS) ↵
  (to COPY files that end with .RPT to the REPORTS directory).
- **Type** DIR\REPORTS ↵
  (to list files in the REPORTS directory).
- **Type** DEL REPORT? ↵
  (to DEL files in the DATA directory, except REPORT.DOC, that begin with REPORT).
- **Type** DEL *.RPT ↵
  (to DEL files in the DATA directory that end with .RPT).

DOS 6 *and* DOS 5:

- **Type** DIR\REPORT?. ↵
  (to list the files, except REPORT.DOC, that *begin* with REPORT).
  DOS lists the REPORTS directory, but no files.
- **Type** DIR *.RPT ↵
  (to list the files that *end* with .RPT).
  DOS reports "File not found."

LESSON FIVE

EXERCISE 46 (page 116)
STEP 8, (bullet 7)

(• **Transfer** the files HURRAH and NOT from DATA to MISC)

You should be in the DATA directory with this prompt showing: A:\PROGRAMS\DATA>

Transfer HURRAH to MISC:

DOS 6 only

- **Type** MOVE HURRAH \MISC ↵

DOS 5 only

- **Type** COPY HURRAH \MISC ↵
- **Type** DIR \MISC ↵ (DOS displays HELLO, HURRAH, and NOT toward the end of the list).
- **Type** DEL HURRAH ↵

Transfer NOT to MISC:

DOS 6 only:

- **Type** MOVE NOT \MISC ↵

DOS 5 only:

- **Type** COPY NOT \MISC ↵
- **Type** DIR \MISC ↵ (NOT should be listed).
- **Type** DEL NOT ↵

NOTE: Return to page 116 and continue with the command at the bottom of the page (change to the MISC directory).

Appendix I — Solutions to Practice Exercises

LESSON ONE
Practice Exercise 7

1. Varies
2. ----
3. A:↵
4. PROMPT↵
5. PROMPT Your Name↵
6. PROMPT Today's date is $D↵
7. PROMPT (optional) $_ (optional)
8. PROMPT PG↵
9. VER↵
10. CLS↵
11. ----
12. PROMPT Time: $T↵
13. PROMPT PG↵
14. CLS↵
15. C:↵
16. A:↵
17. ----
18. C:↵
19. ----
20. A:↵
21. ----
22. ----
23. ----
24. A:↵
25. ----
26. C:↵
27. ----

LESSON TWO
Practice Exercise 16

1. Turn on the computer
    Access the DOS prompt on the hard disk
    Change to drive A:
    Change to the common prompt:
    PROMPT PG
2. DIR
3. DIR C:\
4. DIR/P
5. DIR/W
6. CD PROGRAMS\DATA or CD\PROGRAMS\DATA
7. DIR
8. DIR/O
9. DIR/O:S
10. DIR *.DOC
11. DIR M*.*
12. CD\
13. TREE
14. CD FOOD\GOODIES or CD\FOOD\GOODIES
15. DIR
16. DIR>PRN
17. Turn the on-line light off on
    the printer
    Press the form feed button
    Turn the on-line light back on
18. CD\
19. ----

LESSON TWO
Practice Exercise 17

1. Turn on the computer
    Access the DOS prompt on the hard disk
    Change to drive A:
    Change to the common prompt:
    PROMPT PG
2. CD FOOD\VEGGIES or CD\FOOD\VEGGIES
3. CD↵
4. DIR
5. DIR>PRN
6. DIR\FOOD\GOODIES
7. DIR\FOOD\GOODIES>PRN
8. Turn the on-line light off on
    the printer
    Press the form feed button
    Turn the on-line light back on
9. CD..
10. CD..
11. DIR BAK or DIR\BAK
12. DIR FOOD or DIR\FOOD
13. CD PROGRAMS or CD\PROGRAMS
14. DIR\BAK
15. DIR\FOOD
16. CD\FOOD
17. TREE
18. CD\
19. DIR C:
20. DIR C:\DOS
21. ----

LESSON THREE
Practice Exercise 28

1. DISKCOPY A: A:/V
2. ----
3. COPY LETTER1 LETTER4
4. COPY *.MEM *.BAK
5. COPY LETTER4 \PROGRAMS\DATA
6. COPY *.VEG \FOOD\VEGGIES
7. COPY *.BAK \BAK
8. COPY *.VEG \BAK*.BAK
9. CD \GAMES
10. COPY *.* \BAK
11. CD\
12. COPY P*.* \BAK
13. DIR \BAK>PRN
14. ----

NOTE: Answers 5, 6, 7, 8, 9, 13 and 14 are also correct without the initial backslash (\) that represents the root directory.

LESSON THREE
Practice Exercise 29

1. ----
2. DEL OLDMAID.GAM
3. DEL *.BAK
4. DEL \GAMES\JEOPARDY.GAM
5. DEL \BAK*.GAM
6. CD \FOOD\GOODIES
7. DEL *.*
8. CD\
9. REN LOPEZ.RPT LOPEZRPT.BAK
10. REN *.GAM *.FUN
11. DOS 6.0 MOVE LOPEZRPT.BAK \BAK
    DOS 5.0 COPY LOPEZRPT.BAK \BAK
    DEL LOPEZRPT.BAK
12. DOS 6.0 MOVE *.FUN \GAMES
    DOS 5.0 COPY *.FUN \GAMES
    DEL *.FUN
13. DOS 6.0 MOVE \GAMES \FUN
14. DOS 6.0 TREE
15. TYPE HURRAH
16. TYPE \PROGRAMS\DB.EXE
17. TYPE \PROGRAMS\SHOWME.BAT
18. TYPE HURRAH>PRN
19. DIR/S>PRN
20. FORMAT A:
21. DISKCOPY A: A:/V
22. ----

NOTE: Answers 4, 5, 11, 12, 13, 16, and 17 are also correct without the initial backslash (\) that represents the root directory.

LESSON FOUR
Practice Exercise 43

1. ----
2. DIR/S/P, Ctrl + C
3. FASTHELP REN (6.0) or HELP REN (5.0)
4. CHKDSK
5. ----
6. Press F3
7. DIR MUSIC.DB /S
8. DIR *.GAM /S
9. F3 >PRN ↵
10. ----
11. Press F1 4 times, type J, press F3
12. ----
13. Press F1 4 times, press Ins, type S, press F3
14. ----
15. Press F1 3 times, press Del, press F3
16. CD\PROGRAMS, SS, CD\
17. DATE ↵ ↵
18. TIME ↵ ↵
19. VOL or VOL A:
20. VOL C:
21. LABEL, DATADISK #3
22. VOL or VOL A:
23. LABEL, LEARNING
24. VOL or VOL A:
25. ----

LESSON FIVE
Practice Exercise 52

1. ----
2. MD BAK
3. MD TOYS
4. MD NEW
5. RD NEW
6. CD \PROGRAMS\DATA
7. MD SS
8. MD DB
9. MD WP
10. CD\
11. XCOPY \GAMES \TOYS
12. XCOPY \FOOD \BAK /S
13. TREE
14. CD \PROGRAMS\DATA
15. DOS 6 MOVE *.WK SS
    DOS 5 COPY *.WK SS
    DEL *.WK
16. DOS 6 MOVE *.DB DB
    DOS 5 COPY *.DB DB
    DEL *.DB
17. DOS 6 MOVE *.DOC WP
    DOS 5 COPY *.DOC WP
    DEL *.DOC
18. CD\
19. DOS 6 DELTREE \TOYS
    DOS 5 CD\TOYS
    DEL *.*, Y
    CD\
    RD TOYS
20. DOS 6 DELTREE \BAK
    DOS 5 CD\BAK
    DEL *.*, Y
    CD\
    RD BAK
21. TREE
22. DIR/S>PRN
    force printer to eject last page
23. ----

LESSON SIX

Practice Exercise 64

1. ----
2. **Type** EDIT; **press** Esc
3. **Choose** **F**ile, **E**xit
4. **Type** EDIT MISC\EDITOR
5. **Click** **O**ptions
   or **Press** Alt, O (**O**ptions)
6. **Click** **O**ptions
   or **Press** Alt, Alt or Esc
7. **Click** **F**ile, **P**rint
   or **Press** Alt, F (**F**ile), P (**P**rint)
8. **Click** < Cancel > or **Press** Esc
9. **Choose** **F**ile, **N**ew; then **N**o, if asked
10. Type text as displayed
11. **Choose** **F**ile, **S**ave;
    Type MISC\LSNSIX in the *File Name text box*; **press** ↵
    or **select** the MISC directory in the *Dirs/Drives list box*; **select** the File Name text box; **type** LSNSIX in the text box; and **press** ↵
12. **Choose** **F**ile, **P**rint; **choose** < OK >; **force** printer to eject the paper
13. **Choose** **F**ile, **N**ew; then **N**o, if asked
14. **Choose** **F**ile, **O**pen;
    Type MISC\LSNSIX in the *File Name text box*; **press** ↵
    or **type** *.* in the *File Name text box*; press ↵; **choose** MISC in the *Dirs/Drives list box*; **choose** LSNSIX in the *Files list box*
15. **Press** Ctrl + Home
16. **Press** End
17. **Press** Home
18. **Press** Ctrl + →
19. **Press** Ctrl + ←
20. **Press** Ctrl + End
21. **Move** to the beginning of the text file; **hold down** Shift while you **press** → 15 times; **release** Shift
22. **Move** to the beginning of the "word practice"; **hold down** Shift while you **press** Ctrl + →; **release** Shift
23. **Move** to the beginning of the third line; **hold down** Shift while you **press** ↓; **release** Shift
24. **Move** the *mouse pointer* to the beginning of the word, practice; **drag** the *mouse pointer* to the space past practice; release the button
25. **Move** the *mouse pointer* to the beginning of the third line; **drag** the *mouse pointer* to the beginning of the fourth line; release the button
26. **Choose** **S**earch, **F**ind; **type** you used in the *Find What text box*; **press** ↵
27. **Press** Del while the word is still highlighted; and press BkSp to delete the space
    or **move** the cursor to the beginning of the text to delete and press Del until it is deleted
28. **Press** Ctrl + Home or **click** the first character in the text file
29. **Choose** **S**earch, **F**ind; **type** procedures in the *Find What text box*; **press** ↵
30. **Press** F3
31. **Press** Del while the word is still highlighted
    or **move** the cursor to the beginning of the text to delete and press Del until it is deleted
32. **Select** "task"; **press** Ctrl + Ins (or **choose** **E**dit, **C**ut); **move** the cursor to the spot where "procedures" was; **press** Shift + Ins (or **choose** **E**dit, **P**aste)
33. **Move** the *insert* cursor to the end of the word "task"; type "s"
34. **Press** Ins
35. **Move** the *replace* cursor to the first letter in "procedures"; **type** "strategies"
36. **Press** Ins
37. **Move** the *insert* cursor to the "b" in "book"; **type** "handy" and press Space
38. **Choose** **F**ile, **P**rint; **choose** < OK >; **force** printer to eject the paper
39. **Choose** **F**ile, **E**xit; **choose** < No >
40. ----

LESSON SEVEN
Practice Exercise 75

1. ----
2. EDIT DATA.BAT
   Type this batch file:
   CD\PROGRAMS
   DB
   CD\
   Save and Exit DOS Editor
3. **Type** DATA; **press** ↵ (to exit the program)
4. PATH
5. PATH;
6. PATH
7. PATH C:\DOS;C:\MOUSE;A:\PROGRAMS
8. PATH
9. SS; ↵
10. ECHO
11. ECHO OFF
12. ECHO
13. ECHO Where did the prompt go?
14. ECHO ON
15. EDIT FUN.DAT
    Type the message as shown
    Save and exit DOS editor
16. EDIT FUN.BAT
    Type the batch file as shown
    Save and **exit** DOS editor
17. FUN; any key
18. EDIT BAKUP.BAT
    Type a batch file similar to this one:

```
@ECHO OFF
REM This batch file backs up the MEMOS directory
CLS
COPY \PROGRAMS\DATA\MEMOS\*.* \TEMP
DIR \TEMP
PAUSE
CLS
```

    Save and **exit** DOS Editor
19. BAKUP; any key
20. EDIT AUTO.BAT
    Type the batch file as shown
    Save and **exit** DOS Editor
21. AUTO; ↵
22. CD C:\; SYS A:
23. Place the Duplicate Learning Disk in drive A: and close the latch, if necessary; **press** Ctrl+Alt+Del; **press** ↵; **press** ↵
24. REN AUTO.BAT AUTOEXEC.BAT
25. Place the Duplicate Learning Disk in drive A: and close the latch, if necessary; **press** Ctrl+Alt+Del; **press** ↵
26. DIR
27. DEL A:\COMMAND.COM ↵, if necessary, **type** ATTRIB -R A:\COMMAND.COM ↵ and repeat first part of this step
28. DEL A:*.*; Y
29. DIR
30. CD TEMP
31. DIR
32. DEL *.*; Y
33. DIR
34. CD\
35. ---

LESSON EIGHT
Practice Exercise 88

1. ----
2. **Type** DOSSHELL↵
3. **Choose** Options, Colors, Emerald City; OK
4. **Choose** Options, Colors, Ocean; OK
5. **Choose** Options, Display, Text 25 lines Low Resolution; OK
6. **Choose** Options, Display, Graphics 25 lines Low Resolution; OK
7. **Choose** View, Single File List
8. **Choose** View, Program/File List
9. **Click** on the drive C: icon
   Select the drive C: icon and **press** ↵
10. **Click** on the drive A: icon
    Select the drive A: icon and **press** ↵
11. **Click** on PROGRAMS
    Select the *Directory Tree area*, then use ↓ or ↑ to move to PROGRAMS
12. **Click** on [+] by PROGRAMS
    Select PROGRAMS; **press** +
13. **Click** on [-] by PROGRAMS
    Select PROGRAMS; **press** -
14. **Select** PROGRAMS; **click** on Tree, Expand Branch
    Select PROGRAMS; **press** *
15. **Click** on Tree, Expand All
    Press Ctrl + *
16. **Click** on [-] by A:\
    Select the A:\ directory; **press** -
17. **Click** on [+] by A:\
    Select the A:\ directory; **press** +
18. **Select** A:\; **choose** File, Create Directory; **type** TEST ↵
19. **Click** on TEST; **click** on File, Delete...; **click** on **OK**
    Select TEST; **press** Del; **press** ↵
20. **Click** on GAMES
    Select the *Directory Tree area*, then use ↓ or ↑ to move to GAMES
21. **Choose** Options, File Display Options... ; **type** C*.* in the **Name** *text box*; **choose OK**
22. **Choose** Options, File Display Options... ; **type** *.*; OK. in the **Name** *text box*; **choose OK**
23. **Choose** Options, File Display Options... ; **select** the **Size** *option button*; **choose OK**
24. **Choose** Options, File Display Options... ; **select** the **Name** *option button*; **choose OK**
25. **Click** on OLDMAID.GAM
    Select the *File List area*, then use ↓ or ↑ to move to OLDMAID.GAM
26. **Click** on CLUE.GAM; **press** Shift *while* you **click** on OLDMAID.GAM
    Select CLUE.GAM; **press** Shift *while* you **press** ↓ to OLDMAID.GAM
27. **Click** on CLUE.GAM; **press** Ctrl *while* you **click** on OLDMAID.GAM
    Select CLUE.GAM; **press** Shift + F8; **press** ↓ to OLDMAID.GAM; **press** Space; **press** Shift + F8
28. **Choose** Files, Select All
29. **Choose** Files, Deselect All
30. **Click** on File, Exit
    Press F3
31. ----

LESSON EIGHT
Practice Exercise 89

1. ----
2. **Type** DOSSHELL↵
3. **Click** on MISC
   Select the *Directory Tree area*, then use ↓ or ↑ to move to MISC
4. **Select** the *File List area*; **choose** **F**iles, **S**elect All
5. **Press** Ctrl *while* you **drag** the files to the TEMP directory
   Press F8; **type** A:\TEMP in the "To" *text box*; **press** ↵
6. **Click** on TEMP
   Select the *Directory Tree area*, then use ↓ or ↑ to move to TEMP
7. **Select** the *File List area*; **select** *all* the files in the *File List area*; **choose** **F**ile, Re**n**ame... ; **type** HELLO.TMP in the "New Name" *text box*; **press** ↵; repeat this process for the last two files
8. **Select** *all* files in the *File List area*
   Drag the files to the MISC directory
   Press F7; **type** A:\MISC in the "To" *text box*; **press** ↵
9. **Click** on MISC
   Select the *Directory Tree area*, then use ↓ or ↑ to move to MISC
10. **Select** the three non-adjoining files that end with .TMP; **click** on **F**ile, **D**elete...; **click** on **OK** in the "Delete Files" dialog box; **click** on **OK** in the "Delete File Confirmation" box for each of the three files
    Select the *File List area*; **select** the three non-adjoining files that end with .TMP; **press** Del; **press** ↵ to confirm the "Delete Files" dialog box; **press** ↵ to accept *Yes*, and delete each of the three files as they appear in the "Delete File Confirmation" box
11. **Click** on HURRAH; **click** on **F**ile, **V**iew File Contents
    Select HURRAH; **press** F9
12. **Choose** **V**iew, **R**estore
13. **Choose** **F**ile, **R**un...; **type** A:\PROGRAMS\WP
14. **Press** ↵; **press** any key
15. **Click** on PROGRAMS
    Select the *Directory Tree area*, then use ↓ or ↑ to move to PROGRAMS
16. **Double-click** on DB.EXE
    Select DB.EXE; **press** ↵
17. **Press** ↵; **press** any key
18. **Choose** **O**ptions, **E**nable Task Swapper
19. **Double-click** on SS.EXE
    Select SS.EXE; **press** ↵
20. **Press** Ctrl + Esc
21. **Press** Shift *while* you **double-click** on WP.EXE
    Select WP.EXE; **press** Shift *while* you **press** ↵
22. **Double-click** on WP.EXE in the Active Task List Area
    Select the Active Task List area; **select** WP.EXE; **press** ↵
23. **Press** Ctrl + Esc
24. **Press** and **hold** Alt *while* you **tap** Tab until SS.EXE is displayed in the bar at the top of the screen; then **release** both keys
25. **Press** and **hold** Alt *while* you **tap** Tab until DOS Shell is displayed in the bar at the top of the screen; then **release** both keys
26. **Double-click** on SS.EXE in the Active Task List Area; **press** ↵; **press** any key
    Select the Active Task List area; **select** SS.EXE; **press** ↵; **press** any key
27. **Double-click** on WP.EXE in the Active Task List Area; **press** ↵; **press** any key
    Select the Active Task List area; **select** WP.EXE; **press** ↵; **press** any key
28. **Choose** **O**ptions, **E**nable Task Swapper
29. **Click** on **F**ile, E**x**it
    Press F3
30. ----

Appendix J – Solutions to Worksheets

Worksheet solutions are all on back-to-back pages so that they can be removed from the book (for classroom use) without losing any of the other appendixes.

LESSON ONE — Getting Started

Worksheet 1

Answers

1. monitor
2. keyboard
3. software
4. printer
5. disk drive
6. read-only memory (ROM)
7. hard disk
8. floppy disk
9. system software
10. application software (program)
11. firmware
12. hardware
13. DOS
14. processor
15. computer
16. memory
17. mouse

Missed	Score
0	100
1	94
2	89
3	83
4	77
5	71
6	65
7	59
8	53
9	48
10	42
11	36
12	30
13	24
14	18
15	12
16	6
17	0

Worksheet 2

Answers

1. internal DOS commands
2. DOS prompt
3. disks
4. external DOS commands
5. you (user)
6. program
7. disk density
8. DOS
9. bytes
10. hardware
11. disk capacity
12. DOS command
13. disk and directory structure
14. booting

Missed	Score
0	100
1	93
2	86
3	79
4	72
5	65
6	58
7	51
8	44
9	37
10	30
11	23
12	16
13	9
14	0

Worksheet 3

Answers

1. filename extension
2. directory
3. ASCII file
4. path
5. hard disk drive
6. disk drives
7. floppy disk drive
8. subdirectory
9. file
10. root directory
11. directory structure
12. current directory
13. program file
14. filename
15. data file

Missed	Score
0	100
1	94
2	87
3	80
4	74
5	67
6	61
7	54
8	47
9	40
10	34
11	27
12	20
13	14
14	8
15	0

Worksheet 4

Answers

1. disk capacity
2. Access the DOS prompt
3. floppy disk
4. DOS prompt
5. floppy disk size
6. active drive
7. disk density
8. Changing drives
9. hard disk
10. active DOS prompt
11. Disk drives
12. write-protect tab
13. write-protect

Missed	Score
0	100
1	93
2	85
3	77
4	70
5	62
6	55
7	47
8	40
9	32
10	24
11	17
12	9
13	0

Worksheet 5

Answers

1. VER (version)
2. minor version change
3. version
4. major version change
5. CLS (clear screen)
6. error message
7. current drive
8. path
9. PROMPT
10. default prompt
11. the most common prompt

Missed	Score
0	100
1	91
2	82
3	73
4	61
5	55
6	46
7	37
8	28
9	19
10	10
11	0

Worksheet 6

Answers

1. answers will vary
2. answers will vary
3. answers will vary
4. answers will vary
5. $G
6. $P
7. $D
8. $T
9. $_
10. write-protect the disk
11. uncover the hole in the write-protect slot
12. cover the write-enable notch
13. A:
14. PROMPT HELLO
15. PROMPT TODAY IS $D
16. PROMPT
17. PROMPT PG
18. CLS
19. VER
20. C:

Missed	Score
0	100
1	95
2	90
3	85
4	80
5	75
6	70
7	65
8	60
9	55
10	50
11	45
12	40
13	35
14	30
15	25
16	20
17	15
18	10
19	5
20	0

LESSON TWO — Exploring Directories

Worksheet 7

Answers

1. DIR (directory)
2. DIR and wildcards
3. DIR and switches with options
4. wildcards
5. switch
6. output
7. switch option
8. Redirect output to the printer
9. PRN
10. scrolling
11. redirect
12. directory
13. DIR and switches

Missed	Score
0	100
1	93
2	85
3	77
4	70
5	62
6	55
7	47
8	40
9	32
10	24
11	17
12	9
13	0

Worksheet 8

Answers

1. TREE
2. More DIR
3. subdirectory
4. path
5. directory
6. parent directory
7. root directory
8. CD (change directory)
9. directory branch
10. parent levels
11. parent structure
12. current directory
13. MORE
14. pipe character (|)

Missed	Score
0	100
1	93
2	86
3	79
4	72
5	65
6	58
7	51
8	44
9	37
10	30
11	23
12	16
13	9
14	0

Worksheet 9

Answers

1. DIR
2. switch
3. TREE
4. CD
5. DIR
6. DIR DATA
7. DIR/P
8. DIR/W
9. DIR/O
10. DIR/O:-D
11. DIR M*.*
12. DIR *.DOC
13. L*.TXT
14. DIR>PRN
15. DIR S*.*>PRN
16. TREE
17. TREE FOOD
18. CD GOODIES
19. CD..
20. CD\

Missed	Score
0	100
1	95
2	90
3	85
4	80
5	75
6	70
7	65
8	60
9	55
10	50
11	45
12	40
13	35
14	30
15	25
16	20
17	15
18	10
19	5
20	0

Worksheet 10

Answers

1. CD \GAMES
2. CD \FOOD\GOODIES
3. CD DATA\WP
4. CD \PROGRAMS\DATA\SS
5. CD \FOOD\GOODIES
6. DIR GOODIES
7. DIR \GAMES
8. DIR DATA\SS
9. DIR C:
10. DIR C:\
11. DIR C:\DOS

Missed	Score
0	100
1	91
2	82
3	73
4	61
5	55
6	46
7	37
8	28
9	19
10	10
11	0

LESSON THREE — Frequently Used DOS Commands

Worksheet 11

Answers

1. wildcards
2. filename pattern
3. COPY
4. COPY files to different directories
5. COPY a file to the same directory
6. COPY a group of files to the same directory
7. write-protect tab
8. overwrite a file
9. source disk
10. write-protect
11. target disk
12. verify switch (/v)
13. DISKCOPY

Missed	Score
0	100
1	93
2	85
3	77
4	70
5	62
6	55
7	47
8	40
9	32
10	24
11	17
12	9
13	0

Worksheet 12

Answers

1. FORMAT
2. TYPE
3. UNDELETE
4. REN (rename)
5. program file
6. batch file
7. ASCII file
8. DEL (delete)
9. MOVE

Missed	Score
0	100
1	89
2	78
3	67
4	56
5	45
6	34
7	23
8	12
9	0

Worksheet 13

Answers

1. no
2. yes
3. write-protect the disk
4. cover the write-enable notch
5. uncover the hole in the write-protect slot
6. verify switch or /v
7. DIR
8. overwrite a file
9. /F:size switch
10. DISKCOPY A: A:/V
11. COPY COOKIES.DES COOKIES.FUN
12. COPY *.LET *.BAK
13. COPY COOKIES.DES \FOOD\GOODIES
14. COPY *.MEM \PROGRAMS\DATA
15. COPY *.MEM \BAK*.BAK
16. COPY RADISH.VEG \FOOD\VEGGIES\RADISH.RAD
17. COPY *.* \BAK

NOTE: Answers 13-17 are also correct without the initial backslash (\) that represents the root directory.

Missed	Score
0	100
1	94
2	89
3	83
4	77
5	71
6	65
7	59
8	53
9	48
10	42
11	36
12	30
13	24
14	18
15	12
16	6
17	0

Worksheet 14

Answers

1. DEL CABBAGE.VEG
2. DEL *.RPT
3. DEL *.*
4. DEL\FOOD\VEGGIES\CARROTS.VEG
5. UNDELETE JONES.LET
6. UNDELETE *.BAK
7. REN SMITH.LET SMITHLET.BAK
8. REN *.RPT *.REP
9. MOVE FRUIT.DES \FOOD\GOODIES
10. MOVE M*.* \BAK
11. MOVE \BAK \BAKUP
12. TYPE HELLO
13. TYPE CHANGE.BAT
14. TYPE \PROGRAMS\SS.EXE
15. TYPE C:\AUTOEXEC.BAT
16. FORMAT A:/F:360
17. FORMAT A:/F:720
18. FORMAT A:

Missed	Score
0	100
1	95
2	89
3	84
4	78
5	73
6	67
7	62
8	56
9	50
10	45
11	39
12	34
13	28
14	23
15	17
16	11
17	6
18	0

NOTE: Answers 4, 9, 10, 11, and 14 are also correct without the initial backslash (\) that represents the root directory. However, answer 15 should have the root (\) directory backslash in case the hard disk happens to have a directory other than the root directory current .

LESSON FOUR — Other Useful DOS Commands

Worksheet 15
Answers

1. HELP (5.0 only)
2. FASTHELP (6.0 only)
3. command name
4. parameter
5. switch
6. DOS command
7. CHKDSK
8. Find files
9. destination parameter
10. subdirectory switch (/S)
11. command parts
12. source parameter
13. three main command parts
14. four small command parts
15. HELP (6.0 only)
16. hidden files
17. bad sectors

Missed	Score
0	100
1	94
2	89
3	83
4	77
5	71
6	65
7	59
8	53
9	48
10	42
11	36
12	30
13	24
14	18
15	12
16	6
17	0

Worksheet 16
Answers

1. time parameters
2. VOL (volume)
3. Correct a command
4. DATE
5. date parameters
6. serial number
7. volume
8. LABEL
9. Cancel a command
10. Repeat a command
11. volume label
12. TIME
13. batch file
14. program
15. Run a program

Missed	Score
0	100
1	94
2	87
3	80
4	74
5	67
6	61
7	54
8	47
9	40
10	34
11	27
12	20
13	14
14	8
15	0

Worksheet 17
Answers

1. any order:
   1) command name
   2) parameters
   3) switches
2. parameters
3. command name
4. switches
5. switches
6. parameters
7. command name
8. any order:
   1) space
   2) slash or /
   3) backslash or \
   4) colon or :
9. backslash or \
10. colon or :
11. space
12. backslash or \
13. slash or /
14. colon or :
15. backslash or \
16. destination parameter
17. source parameter

Missed	Score
0	100
1	96
2	91
3	87
4	82
5	78
6	73
7	69
8	64
9	60
10	55
11	50
12	46
13	41
14	37
15	32
16	28
17	23
18	19
19	14
20	10
21	5
22	0

Worksheet 18
Answers

1. FASTHELP (6.0) or
   HELP (5.0)
2. CHKDSK
3. Press CTRL + C
4. /S (subdirectory)
5. F3
6. F1
7. FASTHELP (6.0) or
   HELP (5.0)
8. FASTHELP COPY (6.0) or
   HELP COPY (5.0)
9. CHKDSK A:
10. DIR MEMBER.DB /S
11. DIR *.EXE /S
12. CTRL + C
13. F3
14. F1
15. DATE enter, enter
16. DATE enter, 8-5-98 enter
17. TIME enter, enter
18. TIME enter, 11:15A enter
19. VOL
20. VOL C:
21. LABEL MYDISK
22. FUN
23. PROGS\CHANGE

Missed	Score
0	100
1	96
2	92
3	87
4	83
5	79
6	74
7	70
8	66
9	61
10	57
11	53
12	48
13	44
14	40
15	35
16	31
17	27
18	22
19	18
20	13
21	9
22	5
23	0

LESSON FIVE — Organizing Files

Worksheet 19

Answers

1. directory
2. directory level
3. directory structure
4. XCOPY
5. Print contents of disk
6. directory branch
7. filename
8. RD (remove directory)
9. transfer files
10. organize files
11. filename extension
12. DELTREE (DOS 6) or delete directory (DOS 5)

Missed	Score
0	100
1	92
2	84
3	76
4	68
5	60
6	52
7	44
8	36
9	28
10	20
11	12
12	0

Worksheet 20

Answers

1. 1) use a file naming system
   2) use a directory system
2. extension
3. because of its large capacity
4. MOVE
5. COPY, DEL
6. XCOPY
7. MD (make directory)
8. RD (remove directory)
9. DELTREE
10. empty the directory; change out of the directory; use RD to remove the directory
11. MD LETTERS
12. COPY *.DOC LETTERS
13. DEL *.DOC
14. RD TEMP
15. DOS 6 MOVE *.DB DBASE
    DOS 5 COPY *.DB DBASE, DEL *.DB
16. XCOPY MISC TEMP
17. XCOPY PROGRAMS BAK /S
18. DOS 6 DELTREE MISC
    DOS 5
    a) CD\MISC
    b) DEL *.*
    c) CD\
    d) RD\MISC
19. DOS 6 DELTREE FOOD /S
    DOS 5
    a) change to the lowest level directory
    b) delete all the files
    c) change to the parent directory
    d) remove the directory
    e) repeat steps a-d until the directory branch is deleted

Missed	Score
0	100
1	95
2	90
3	85
4	80
5	75
6	70
7	65
8	60
9	55
10	50
11	45
12	40
13	35
14	30
15	25
16	20
17	15
18	10
19	5
20	0

LESSON SIX — DOS Editor

Worksheet 21
Answers

1. menu bar
2. scroll bar
3. status bar
4. DOS Editor
5. editing window
6. batch files
7. unformatted text files
8. ASCII
9. command
10. select
11. cursor
12. choose
13. cancel
14. mouse pointer
15. inactive command
16. text editor
17. line/space counter
18. Use the menu bar
19. Start DOS Editor
20. menu

Missed	Score
0	100
1	95
2	90
3	85
4	80
5	75
6	70
7	65
8	60
9	55
10	50
11	45
12	40
13	35
14	30
15	25
16	20
17	15
18	10
19	5
20	0

Worksheet 22
Answers

1. check boxes
2. dialog box
3. command button
4. deselect
5. option buttons
6. Use dialog boxes
7. scroll arrow
8. text box
9. list box
10. Create a text file
11. Save a text file
12. Move the cursor
13. Print a text file
14. Open a text file
15. scroll box

Missed	Score
0	100
1	94
2	87
3	80
4	74
5	67
6	61
7	54
8	47
9	40
10	34
11	27
12	20
13	14
14	8
15	0

Worksheet 23
Answers

1. cut text
2. case sensitive
3. delete text
4. paste text
5. highlight
6. Select text
7. insert text
8. Edit text
9. Find text
10. block
11. whole word
12. copy text
13. insert cursor
14. buffer
15. replace text
16. replace cursor

Missed	Score
0	100
1	94
2	88
3	82
4	75
5	69
6	63
7	57
8	50
9	44
10	38
11	32
12	25
13	19
14	13
15	7
16	0

Worksheet 24
Answers

1. text editor
2. unformatted text files, or text files, or batch files
3. batch files
4. menu bar
5. editing window
6. line/space counter
7. menu
8. select
9. choose
10. Alt
11. dialog box
12. text box
13. option buttons
14. command button
15. check boxes
16. list box
17. buffer
18. yes
19. no
20. Home
21. End
22. EDIT
23. EDIT GAMES.BAT

Missed	Score
0	100
1	96
2	92
3	87
4	83
5	79
6	74
7	70
8	66
9	61
10	57
11	53
12	48
13	44
14	40
15	35
16	31
17	27
18	22
19	18
20	13
21	9
22	5
23	0

LESSON SEVEN — Automating DOS

Worksheet 25
Answers

1. executable files
2. CONFIG.SYS
3. search path
4. batch file
5. PATH
6. .DAT file
7. AUTOEXEC.BAT
8. Automating DOS

Missed	Score
0	100
1	88
2	75
3	63
4	50
5	68
6	25
7	13
8	0

Worksheet 26
Answers

1. SYS
2. PAUSE
3. Terminate a batch file
4. warm boot
5. ECHO
6. system disk
7. AUTOEXEC.BAT
8. hidden system files
9. REM
10. COMMAND.COM

Missed	Score
0	100
1	90
2	80
3	70
4	60
5	50
6	40
7	30
8	20
9	10
10	0

Worksheet 27
Answers

1. AUTOEXEC.BAT
2. CONFIG.SYS
3. any order
   1) one at a time
   2) in a batch
4. DOS Editor
5. PATH
6. .EXE, .BAT, and .COM
7. batch file
8. semicolon (;)
9. CLS
10. PAUSE
11. ECHO (or ECHO OFF)
12. REM
13. Ctrl, Alt, and Del
14. COMMAND.COM
15. at the beginnng of a disk
16. problem on hard disk or as a safety precaution
17. the hard disk
18. Ctrl + C
19. PATH C:\DOS; C:\MOUSE;A:\GAMES
20. SYS A:
21. ECHO OFF
22. PROMPT PG
23. REM Be happy.

Missed	Score
0	100
1	96
2	92
3	88
4	84
5	80
6	75
7	71
8	67
9	63
10	59
11	55
12	50
13	46
14	42
15	38
16	34
17	30
18	25
19	21
20	17
21	13
22	9
23	5
24	0

LESSON EIGHT – DOS Shell

Worksheet 28

Answers

1. choose
2. shortcut keys
3. mouse pointer
4. select
5. text box
6. bars
7. list box
8. graphics display
9. option buttons
10. command buttons
11. text display
12. check boxes
13. icon
14. dialog box
15. areas
16. dimmed command
17. deselect
18. highlight

Missed	Score
0	100
1	95
2	89
3	84
4	78
5	73
6	67
7	62
8	56
9	50
10	45
11	39
12	34
13	28
14	23
15	17
16	11
17	6
18	0

Worksheet 29

1. collapse directories
2. select directories
3. data file
4. expand directories
5. expand all directories
6. program file
7. program list area
8. program item
9. expand directory branch
10. Task Swapper
11. directory icon
12. program group

Missed	Score
0	100
1	92
2	84
3	76
4	68
5	60
6	52
7	44
8	36
9	28
10	20
11	12
12	0

Worksheet 30

Answers

1. any order:
   1) disk drives
   2) directory tree
   3) files list
   4) program list
   5) active task list
2. any order:
   1) text
   2) graphics
3. any order:
   1) mouse
   2) keyboard
4. any order:
   1) click
   2) double-click
   3) drag
5. select
6. choose
7. no
8. any order:
   1) list boxes
   2) text boxes
   3) check boxes
   4) option buttons
   5) command buttons
9. yes
10. Options
11. View
12. Options

Missed	Score
0	100
1	96
2	92
3	88
4	84
5	80
6	75
7	71
8	67
9	63
10	59
11	55
12	50
13	46
14	42
15	38
16	34
17	30
18	25
19	21
20	17
21	13
22	9
23	5
24	0

Worksheet 31

Answers

1. file list area
2. plus or +
3. minus or -
4. Tree
5. File
6. Options
7. Options
8. select them
9. yes
10. File
11. any order:
    1) move
    2) copy
    3) delete
    4) rename
12. File
13. View, Restore
14. program items
15. program group
16. yes
17. File
18. Task Swapper
19. Options
20. CTRL + ESC
21. ALT + TAB

Missed	Score
0	100
1	96
2	92
3	88
4	84
5	80
6	75
7	71
8	67
9	63
10	59
11	55
12	50
13	46
14	42
15	38
16	34
17	30
18	25
19	21
20	17
21	13
22	9
23	5
24	0

Appendix K – Check-off List for Worksheets and Printouts

LESSON ONE

_____ Worksheet 1 (p. 23)
_____ Worksheet 2 (p. 24)
_____ Worksheet 3 (p. 25)
_____ Worksheet 4 (p. 26)
_____ Worksheet 5 (p. 27)
_____ Worksheet 6 (p. 28)

LESSON TWO

_____ Printout, Ex. 12, step 3 (p. 35)
_____ Printout, Ex. 12, step 5 (p. 36)
_____ Printout, Ex. 12, step 7 (p. 37)
_____ Questions, Ex. 13, step 3 (p. 39)
_____ Printout, Ex. 15, step 11 (p. 45)
_____ Printout, Ex. 16, step 17 (p. 47)
_____ Printout, Ex. 17, step 8 (p. 48)
_____ Worksheet 7 (p. 50)
_____ Worksheet 8 (p. 51)
_____ Worksheet 9 (p. 52)
_____ Worksheet 10 (p. 53)

LESSON THREE

_____ Printout, Ex. 20, step 3 (p. 59)
_____ Printout, Ex. 21, step 6 (p. 61)
_____ Printout, Ex. 25, step 6 DOS 6 only (p. 67)
_____ Printout, Ex. 26, step 7 (p. 68)
_____ Printout, Ex. 28, step 13 (p. 71)
_____ Printout, Ex. 29, step 18 (p. 73)
_____ Printout, Ex. 29, step 19 (p. 73)
_____ Worksheet 11 (p. 75)
_____ Worksheet 12 (p. 76)
_____ Worksheet 13 (p. 77)
_____ Worksheet 14 (p. 78)

LESSON FOUR

_____ Printout, Ex. 30, step 4 DOS 6 only (p. 82)
_____ Printout, Ex. 31, step 4 DOS 5 only (p. 83)
_____ Printout, Ex. 32, step 5 DOS 6 only (p. 85)
_____ Printout, Ex. 32, step 6 DOS 6 only (p. 85)
_____ Printout, Ex. 36, step 5 (p. 89)
_____ Printout, Ex. 43, step 9 (p. 100)
_____ Worksheet 15 (p. 102)
_____ Worksheet 16 (p. 103)
_____ Worksheet 17 (p. 104)
_____ Worksheet 18 (p. 105)

LESSON FIVE

_____ Printout, Ex. 44, step 6 (p. 112)
_____ Printout, Ex. 46, step 9 (p. 117)
_____ Printout, Ex. 48, step 7 (p. 123)
_____ Printout, Ex. 51, step 2 (p. 128)
_____ Printout, Ex. 52, step 22 (p. 130)
_____ Worksheet 19 (p. 132)
_____ Worksheet 20 (p. 133)

LESSON SIX

_____ Printout, Ex. 57, step 3 (p. 145)
_____ Printout, Ex. 62, step 10 (p. 155)
_____ Printout, Ex. 64, step 12 (p. 158)
_____ Printout, Ex. 64, step 38 (p. 160)
_____ Worksheet 21 (p. 161)
_____ Worksheet 22 (p. 162)
_____ Worksheet 23 (p. 163)
_____ Worksheet 24 (p. 164)

LESSON SEVEN

_____ Printout, Ex. 68, step 3 (p. 171)
_____ Printout, Ex. 69, step 13 (p. 175)
_____ Worksheet 25 (p. 187)
_____ Worksheet 26 (p. 188)
_____ Worksheet 27 (p. 189)

LESSON EIGHT

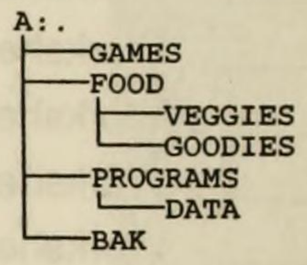
_____ Worksheet 28 (p. 221)
_____ Worksheet 29 (p. 222)
_____ Worksheet 30 (p. 223)
_____ Worksheet 31 (p. 224)

Appendix L – Lesson Five Summary

Exercise 44 - empty root directory

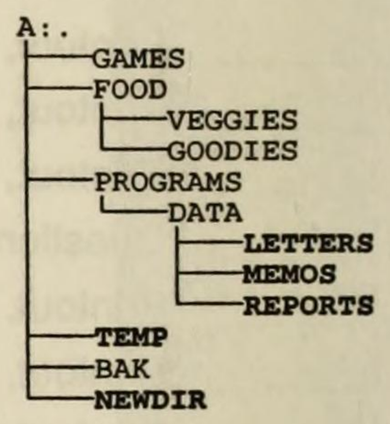
step	action		
2	transfer *.VEG	from root	to \FOOD\VEGGIES
3	transfer *.DES	from root	to \FOOD\GOODIES
4	transfer *.GAM	from root	to \GAMES
5	transfer *.*	from root	to \PROGRAMS\DATA
6	print		

Directory structures at end of exercises



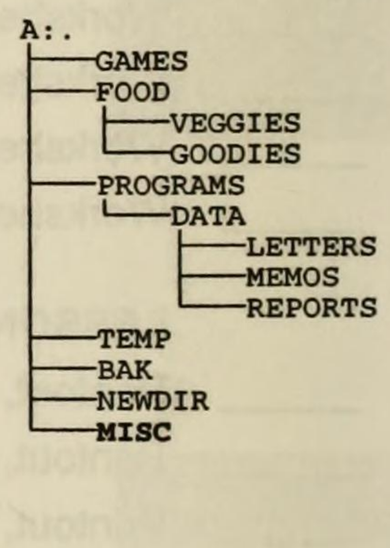
Exercise 45 - MD (make directory)

step	action		
2	MD TEMP	from root	
3	MD NEWDIR	from root	
4	MD LETTERS	from \PROGRAMS\DATA	
4	MD MEMOS	from \PROGRAMS\DATA	
4	MD REPORTS	from \PROGRAMS\DATA	



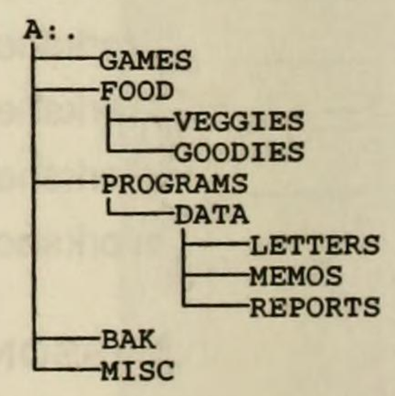
Exercise 46 - Transfer files

step	action		
2	display directory tree		
3	CD \PROGRAMS\DATA		
3	transfer *.LET	from DATA	to LETTERS
3	transfer LETTER?	from DATA	to LETTERS
4	transfer *.MEM	from DATA	to MEMOS
4	transfer MEMO?	from DATA	to MEMOS
5	transfer *.RPT	from DATA	to REPORTS
5	transfer REPORT?	from DATA	to REPORTS
6	CD\		
6	COPY C*.*	from GAMES	to TEMP
7	MD MISC	from root	
8	transfer HELLO	from DATA	to \MISC
8	transfer HURRAH	from DATA	to \MISC
8	transfer NOT	from DATA	to \MISC
9	print		



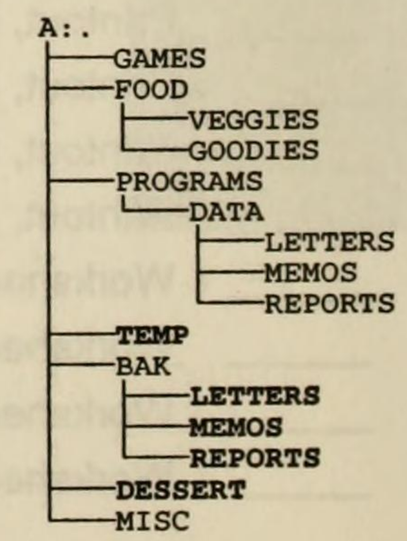
Exercise 47 - RD (remove directory)

step	action	
2	display directory tree	
3	try to remove a directory	
4	RD TEMP	from root
5	RD NEWDIR	from root
6	make a directory, list the directory, change into and out of the directory, and remove the directory	



Exercise 48 - XCOPY

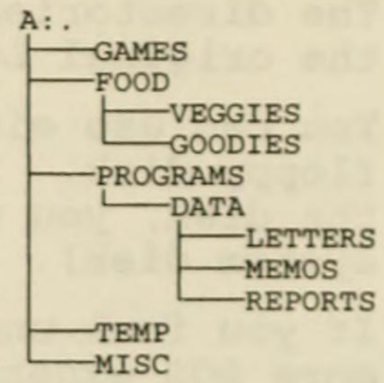
step	action		
2	MD TEMP	from root	
3	XCOPY	from \GAMES	to \TEMP
4	CD \BAK		
4	XCOPY (from within BAK)	from \MISC	to \BAK
4	CD\		
5	XCOPY/S	from \PROGRAMS\DATA	to \BAK
6	XCOPY	from \FOOD\GOODIES	to \DESSERT
7	print tree		



Exercise 49 - DELTREE (DOS 6 ONLY)

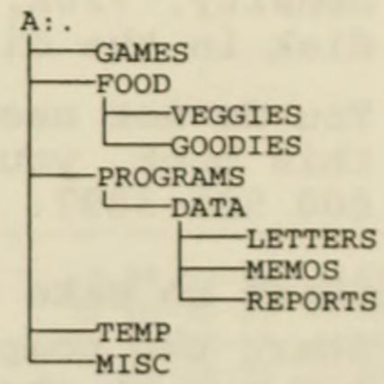
step	action	
2	DELTREE \DESSERT	from root
3	CD \TEMP	
3	DELTREE (from within TEMP)	from \TEMP
3	CD\	
4	DELTREE \BAK	from root

Directory structures at end of exercises



Exercise 50 - Delete directory (DOS 5 ONLY)

step	action	
2	CD \DESSERT	
2	DEL *.*	from DESSERT
2	CD\	
2	RD \DESSERT	
3	CD \TEMP	
3	DEL *.*	from TEMP
3	CD\	
4	CD \BAK (or CD..)	
4	DEL *.*	from BAK
5	CD \LETTERS	
5	DEL *.*	from LETTERS
5	CD \BAK (or CD..)	
5	RD \LETTERS	
6	CD \MEMOS	
6	DEL *.*	from MEMOS
6	CD \BAK (or CD..)	
6	RD \MEMOS	
7	CD \REPORTS	
7	DEL *.*	from REPORTS
7	CD \BAK (or CD..)	
7	RD \REPORTS	
8	CD\	
8	RD \BAK	
9	display directory tree	

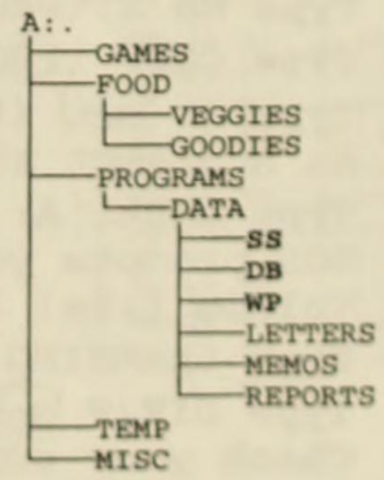


Exercise 51 - Print contents of disk

step	action
2	DIR /S>PRN

Exercise 52 - PRACTICE

step	action		
2	MD BAK	from root	
3	MD TOYS	from root	
4	MD NEW	from root	
5	RD NEW	from root	
6	CD \PROGRAMS\DATA		
7	MD SS	from \PROGRAMS\DATA	
8	MD DB	from \PROGRAMS\DATA	
9	MD WP	from \PROGRAMS\DATA	
10	CD\		
11	XCOPY	from \GAMES	to \TOYS
12	XCOPY /S	from \FOOD	to \BAK
13	display directory tree		
14	CD \PROGRAMS\DATA		
15	transfer *.WK	from \PROGRAMS\DATA	to \PROGRAMS\DATA\SS
16	transfer *.DB	from \PROGRAMS\DATA	to \PROGRAMS\DATA\DB
17	transfer *.DOC	from \PROGRAMS\DATA	to \PROGRAMS\DATA\WP
18	CD\		
19	DELTREE TOYS	from root	
20	DELTREE BAK	from root	
21	display directory tree		
22	print		



Appendix M – Make a 5¼" Learning Disk

If your computer system has a 5¼" drive A: and a 3½" drive B:, you can copy the files from the 3½" Learning Disk to a 5¼" disk to make a 5¼" master Learning Disk for drive A:.

- The directories on your new Learning Disk will not have the same dates as those on the original Learning Disk, but that will not affect the exercises.
- You can use either a double density (DD), 360K, or a high density (HD), 1.2MB, 5¼" floppy disk. However, if you use a double density disk *and* if you have compressed the disk, you will not be able to complete Exercise 74 in Lesson Seven (making a system disk). The system files need more room than what is available.
- If you feel unqualified to do this procedure, you may want to ask someone who has more DOS experience than you do to perform this procedure.
- If you have two 3½" floppy disk drives, you can use this procedure to make a double density, 720K, floppy disk by substituting a double density 3½" disk for the 5¼" disk in the directions below.
- You do not need to use this procedure to make a 5¼ Learning Disk. If you purchased this book, you can order a free 5¼" Learning Disk from DDC Publishing by calling 800 528-3897.

Directions to make a 5¼" master Learning Disk:

1. Start the computer and access the DOS prompt on drive C:.
   A C prompt should appear on the screen: **C:\>** or **C>**
2. Place the 3½" Learning Disk in drive B:.
3. Place a blank 5¼" formatted disk in drive A: and close the latch.
4. **Type** B: ↵ (to change to drive B:)
   A B prompt should appear on the screen: **B:\>** or **B>**
5. **Type** MD A:\GAMES ↵
6. **Type** MD A:\FOOD ↵
7. **Type** MD A:\FOOD\VEGGIES ↵
8. **Type** MD A:\FOOD\GOODIES ↵
9. **Type** MD A:\PROGRAMS ↵
10. **Type** COPY JONES.LET A:\ ↵
11. **Type** MD A:\BAK ↵
12. **Type** COPY *.* A: ↵
    If you are using DOS 6.2, you will get this warning message:
    Overwrite A:\JONES.LET (Yes/No/All)?
    - **Type** Y ↵
13. **Type** COPY \GAMES*.* A:\GAMES ↵
14. **Type** COPY \FOOD\VEGGIES*.* A:\FOOD\VEGGIES ↵
15. **Type** COPY \FOOD\GOODIES*.* A:\FOOD\GOODIES ↵
16. **Type** COPY \PROGRAMS*.* A:\PROGRAMS ↵
17. **Type** MD A:\PROGRAMS\DATA ↵
18. **Type** COPY \PROGRAMS\DATA*.* A:\PROGRAMS\DATA ↵
19. **Type** A: ↵ (to change to drive A:).
    An A prompt should appear on the screen: **A:\>** or **A>**
20. **Type** LABEL A: ↵
    DOS prompts you for a label:
    Volume label (11 characters, ENTER for none)?
21. **Type** LEARNING ↵
22. **Type** DIR/P ↵
    Check your screen output with the result for step 23 on the next page.
23. **Print the directories and files in the root directory:**
    - Make sure your printer is on and ready to receive data.
    - **Type** DIR>PRN ↵

    If the paper does not eject,
    - Turn the "on-line" light **off** (located on your printer).
    - Press the "form feed" button (located on your printer).
    - Turn the "on-line" light back **on**.

    The paper should be ejected.

24. **Print all the directories and files:**
    - Make sure your printer is on and ready to receive data.
    - **Type** DIR/S>PRN ↵

    At least one paper should be ejected.
    If the last paper does not eject,
    - Turn the "on-line" light **off** (located on your printer).
    - Press the "form feed" button (located on your printer).
    - Turn the "on-line" light back **on**.

25. If you suspect that this procedure did not work, repeat the instructions (be sure to use a blank, formatted disk).

26. Take both disks out of their disk drives,
    label the new disk "Learning Disk master,"
    and put a write-protect tab on your new 5¼" Learning Disk.

Step 23 result – a list of the root directory

```
 Volume in drive B is LEARNING
 Volume Serial Number is XXXX-XXXX
 Directory of B:\

GAMES          <DIR>      05-02-93   7:46p
FOOD           <DIR>      05-02-93   7:46p
PROGRAMS       <DIR>      05-22-93   8:41p
JONES     LET          9 05-02-93   7:48p
BAK            <DIR>      05-22-93   8:43p
SMITH     LET          9 05-02-93   8:13p
LOPEZ     LET          9 05-02-93   8:13p
LETTER1                7 05-02-93   8:15p
REPORT3                7 05-02-93   8:16p
LETTER2                7 05-02-93   8:16p
CLUE      GAM          8 05-02-93   8:17p
CORN      VEG          8 05-02-93   8:17p
RADISH    VEG         10 05-02-93   8:17p
POTATOES  VEG         12 05-02-93   8:18p
PUDDING   DES         11 05-02-93   8:19p
LOPEZ     RPT          9 05-02-93   8:19p
REPORT1                7 05-02-93   8:20p
SMITH     RPT          9 05-02-93   8:20p
SMITH     MEM          9 05-02-93   8:20p
TRIVIA    GAM         10 05-02-93   8:21p
MEMO3                  5 05-02-93   8:21p
LOPEZ     MEM          9 05-02-93   8:21p
LETTER3                7 05-02-93   8:22p
JONES     MEM          9 05-02-93   8:22p
JONES     RPT          9 05-02-93   8:23p
JELLO     DES          9 05-02-93   8:23p
OLDMAID   GAM         11 05-02-93   8:23p
MEMO1                  5 05-02-93   8:24p
MEMO2                  5 05-02-93   8:24p
REPORT2                7 05-02-93   8:25p
HELLO                 99 05-25-93   9:36p
HURRAH                54 05-02-93   8:40p
NOT                   60 05-25-93   9:37p
       33 file(s)        430 bytes
                 XXXXXXX bytes free
```

Step 24 result – a list of all the files and directories on the disk

```
 Volume in drive B is LEARNING
 Volume Serial Number is XXXX-XXXX
Directory of B:\

GAMES          <DIR>      05-02-93   7:46p
FOOD           <DIR>      05-02-93   7:46p
PROGRAMS       <DIR>      05-22-93   8:41p
JONES     LET          9 05-02-93   7:48p
BAK            <DIR>      05-22-93   8:43p
SMITH     LET          9 05-02-93   8:13p
LOPEZ     LET          9 05-02-93   8:13p
LETTER1                7 05-02-93   8:15p
REPORT3                7 05-02-93   8:16p
LETTER2                7 05-02-93   8:16p
CLUE      GAM          8 05-02-93   8:17p
CORN      VEG          8 05-02-93   8:17p
RADISH    VEG         10 05-02-93   8:17p
POTATOES  VEG         12 05-02-93   8:18p
PUDDING   DES         11 05-02-93   8:19p
LOPEZ     RPT          9 05-02-93   8:19p
REPORT1                7 05-02-93   8:20p
SMITH     RPT          9 05-02-93   8:20p
SMITH     MEM          9 05-02-93   8:20p
TRIVIA    GAM         10 05-02-93   8:21p
MEMO3                  5 05-02-93   8:21p
LOPEZ     MEM          9 05-02-93   8:21p
LETTER3                7 05-02-93   8:22p
JONES     MEM          9 05-02-93   8:22p
JONES     RPT          9 05-02-93   8:23p
JELLO     DES          9 05-02-93   8:23p
OLDMAID   GAM         11 05-02-93   8:23p
MEMO1                  5 05-02-93   8:24p
MEMO2                  5 05-02-93   8:24p
REPORT2                7 05-02-93   8:25p
HELLO                 99 05-25-93   9:36p
HURRAH                54 05-02-93   8:40p
NOT                   60 05-25-93   9:37p
       33 file(s)        430 bytes
Directory of B:\BAK

.              <DIR>      05-22-93   8:43p
..             <DIR>      05-22-93   8:43p
       2 file(s)          0 bytes
Directory of B:\FOOD

.              <DIR>      05-02-93   7:46p
..             <DIR>      05-02-93   7:46p
VEGGIES        <DIR>      05-02-93   8:27p
GOODIES        <DIR>      05-02-93   8:28p
       4 file(s)          0 bytes
Directory of B:\FOOD\GOODIES

.              <DIR>      05-02-93   8:28p
..             <DIR>      05-02-93   8:28p
CAKE      DES          8 05-02-93   8:45p
COOKIES   DES         11 05-02-93   8:46p
ICECREAM  DES         12 05-02-93   8:46p
PIE       DES          7 05-02-93   8:46p
       6 file(s)         38 bytes
Directory of B:\FOOD\VEGGIES

.              <DIR>      05-02-93   8:27p
..             <DIR>      05-02-93   8:27p
CABBAGE   VEG         11 05-02-93   8:47p
CARROTS   VEG         11 05-02-93   8:47p
KALE      VEG          8 05-02-93   8:47p
LETTUCE   VEG         11 05-02-93   8:47p
CELERY    VEG         10 05-02-93   8:48p
       7 file(s)         51 bytes
Directory of B:\GAMES

.              <DIR>      05-02-93   7:46p
..             <DIR>      05-02-93   7:46p
ASTRO     GAM          9 05-02-93   8:48p
CHESS     GAM          9 05-02-93   8:48p
JEOPARDY  GAM         12 05-02-93   8:49p
       5 file(s)         30 bytes
Directory of B:\PROGRAMS

.              <DIR>      05-22-93   8:41p
..             <DIR>      05-22-93   8:41p
CLS       DAT        290 04-22-93   4:05p
OPENING   DAT        319 04-22-93   4:05p
CD        DAT        479 04-22-93   3:57p
SHOWME    BAT        139 04-22-93   3:59p
DB        EXE      31458 04-22-93   3:21p
SS        EXE      31374 04-22-93   3:06p
WP        EXE      31426 04-22-93   3:10p
DATA           <DIR>      05-22-93   8:43p
      10 file(s)      95485 bytes
Directory of B:\PROGRAMS\DATA

.              <DIR>      05-22-93   8:43p
..             <DIR>      05-22-93   8:43p
MEMBER    DB           9 05-25-93   9:28p
CLUB      DB           7 05-25-93   9:29p
MUSIC     DB           8 05-25-93   9:29p
REPORT    DOC         10 05-25-93   9:30p
SCRIPT    DOC         10 05-25-93   9:30p
PAYROLL   WK          10 05-25-93   9:31p
SALES     WK           8 05-25-93   9:31p
AGENDA    DOC         10 05-25-93   9:32p
GRADES    WK           9 05-25-93   9:32p
      11 file(s)         81 bytes
Total files listed:
      78 file(s)      96115 bytes
                 XXXXXXX bytes free
```

GLOSSARY

.DAT files A *text file* that commonly contains information that is displayed by using a command in a *batch file*.

A

access the DOS prompt To turn on the computer and display the *DOS prompt* on the *hard disk*.

active DOS prompt The last DOS prompt on your screen. DOS leaves the commands you have entered on the screen so that you can see the results of previous commands.

active drive The drive you are currently using. Also called *current* drive.

application software (program) Software that does a specific task, such as word processing. *See* program.

areas Parts of the DOS Shell screen that display different DOS information. The five possible areas are Disk Drives area, Directory Tree area, File List area, Program List area, and Active Task List area.

ASCII (American Standard Code for Information Interchange) Files saved in ASCII format contain only text and are free of any formatting codes (such as underlines). These "text" files often use a .TXT *filename extension*. *See* unformatted text files.

AUTOEXEC.BAT An important batch file that DOS looks for and executes when you turn the computer on. AUTOEXEC.BAT contains commands that set up your work environment the way you want it.

automating DOS To use batch files to execute groups of commands—especially to use the AUTOEXEC.BAT file.

B

bad sectors Areas on a disk that DOS marks as unusable when the disk is formatted. A few *bad sectors* do not necessarily make the entire disk unusable. However, a disk with *bad sectors* should not be used as a *target* disk when copying a disk with the DISKCOPY command. *See* DISKCOPY.

bars Narrow strips in DOS Shell that perform various functions; such as, displaying the title of an area, displaying status of DOS Shell, holding menus, and scrolling lists.

batch file A text file that contains a list of DOS commands that DOS carries out as a set when you run it. Batch files are given a .BAT filename extension when they are created.

block A section of *selected* text in DOS Editor.

booting To begin the computer's start-up process, and load DOS into the computer's memory.

buffer A temporary storage area (in DOS Editor) where text that is *cut* or *copied* is stored, ready to be *pasted* back into a text file. The buffer stores only the last piece of information that is *cut* or *copied*. *Pasting* information from the buffer does not remove it from the buffer.

bytes A *byte* is a unit of measurement. One *byte* is the amount of space needed to hold one character. The size of many computer parts are measured in *bytes*.

C

cancel a command To use Ctrl + C stop DOS from completing a command.

cancel To escape (or back out of) a menu or dialog box in DOS Shell or DOS Editor without completing a command.

case sensitive The Search mode (in DOS Editor) in which Search looks for an *exact* match of the uppercase and lowercase text that you type in the *Find What text box*.

CD (change directory) The DOS command that changes directories or displays the *current* directory.

change drives To make a different disk drive active. *Changing drives* is also referred to as "logging on" to a drive.

check boxes Squares next to items in a dialog box from which you may select as many items as you want (used in DOS Shell and DOS Editor).

CHKDSK (check disk) The DOS command that gives you information about your disk and your computer's memory.

choose To pick a command that initiates an action (often on a selected item) in DOS Shell or DOS Editor. *See* select.

CLS (clear screen) The DOS command that removes all the information from the screen and display a new *DOS prompt* at the top of the screen.

collapse directories To hide directory levels in DOS Shell. Directories that can be *collapsed* have a minus (-) on their *directory icon* [-].

command buttons Small boxes that hold an icon or a word that will carry out a command when chosen (used in DOS Shell and DOS Editor).

command, cancel a *See* cancel a command.

command, correct a *See* correct a command.

command, dimmed *See* dimmed command.

command, DOS *See* DOS command.

command, external DOS *See* external DOS command.

command, internal *See* internal DOS commands.

command name The DOS command; it states the action you want DOS to carry out.

command parts The parts that make up DOS commands; command name, parameters, switches, spaces, slashes, backslashes, and colons.

command, repeat a *See* repeat a command.

COMMAND.COM The *system file* that contains DOS's *internal commands*. DOS puts COMMAND.COM on a *system disk* when you use the SYS command.

commands Instructions to a program that cause an action to be carried out.

common prompt The DOS prompt that is created when you type PROMPT PG and press Enter. The *common prompt* displays the "path to the current directory" followed by the "greater-than sign," for example, **C:\>**. *See* default prompt.

computer An electronic device that performs complex tasks at high speed and with great accuracy. There are two main parts of a computer—the *processor* and the *memory*.

CONFIG.SYS An important *batch-like* file that you use to tell DOS how to manage your computer system's hardware and memory. CONFIG.SYS is executed when the computer system starts.

copy text To transfer *selected* text from a text file into a buffer, leaving the original text intact (in DOS Editor).

COPY The DOS command that duplicates a file (or files).

correct a command To use [F1] to repeat the previous command—one character at a time—and replace, insert, or delete one or more characters.

current directory The directory you are in.

current drive The drive you are using, also called the *active* drive.

cursor A blinking line (or rectangle if you are in typeover mode) that tells you where the next character you type will be displayed (in DOS Editor).

cut text To transfer *selected* text from a text file into a buffer, deleting the original text (in DOS Editor).

D

data file A file that consists of data created in a program, such as a *letter* typed in a word processor. This is the DOS Shell icon that represents a *data file* [≡].

date parameters The objects you want DOS to act on in the *DATE command*, that is, the month, day, and year.

DATE The DOS command that displays or changes the computer's date.

default prompt The DOS prompt that is created when you type only the PROMPT command and press Enter; for example, **C>**. *See* common prompt.

DEL (delete) The DOS command that removes files from a disk.

delete text To remove text from a text file in DOS Editor without placing it in the *buffer*. You cannot *paste* text that has been deleted.

DELTREE (DOS 6 only) The DOS command that deletes a directory and all the files and subdirectories within it. DOS 5 users must first empty all the files from a directory, and then use the RD (remove directory) command to delete directories.

deselect To *unmark* an item so that a future action will *not* activate the item (used in DOS Shell and DOS Editor).

destination parameter Defines the location to which the data specified by the *source parameter* is to be transferred. A *destination parameter* can consist of a drive letter and colon, a path, a file or group of files, or a combination of drive, path, and file. *See* parameter and source parameter.

dialog box A box that appears when a *menu command* with an ellipsis (...) is chosen in DOS Shell or DOS Editor. A dialog box requests additional information before completing the original command.

dimmed command A menu command in DOS Shell that is shown in gray instead of black and cannot be used in the current situation.

DIR (directory) The DOS command that displays a list of files and/or directories in a directory.

directories, collapse *See* collapse directories.
directories, expand all *See* expand all directories.
directories, expand *See* expand directories.
directories, select *See* select directories.

directory The part of the disk structure that holds *files* that are saved on a disk. A directory can also hold other directories (called subdirectories).

directory branch A directory and all the levels of directories that are under it.

directory, CD *See* CD (change directory).
directory, current *See* current directory.

directory icon The small picture of a file folder next to a directory name in DOS Shell.

directory levels The layers of directory levels, starting with the root directory as level one.

directory, MD *See* MD (make directory).
directory, parent *See* parent directory.
directory, RD *See* RD (remove directory).

directory structure The organization of directories on a disk. Also called *directory tree*.

disk capacity The number of bytes a disk can hold. *See* bytes.

disk, check *See* CHKDSK.

disk density Density refers to the surface coating on a disk. The closer together the particles on the disk are, the higher the disk's capacity.

disk drive, floppy *See* floppy disk drive.
disk drive, hard *See* hard disk drive.

disk drives Devices your computer uses to transfer information back and forth between the computer's **memory** and **disks**.

disk, floppy *See* floppy disk.
disk, hard *See* hard disk.
disk, source *See* source disk.
disk, system *See* system disk.
disk, target *See* target disk.

DISKCOPY The DOS command that copies the contents of a floppy disk (the *source* disk) onto another floppy disk (the *target* disk). *See* bad sectors.

disks Media on which information is stored and retrieved.

DOS (Disk Operating System) System software that links you and your programs to the computer's hardware. **DOS** must be in the computer's memory before *application software* can be used. DOS performs many basic tasks such as disk and file management.

DOS command A command that tells DOS to carry out a specific action such as list files on a disk.

DOS Editor A text-editing program that you can use to create simple documents and batch files. *See* ASCII, batch file, text editor, and unformatted text file.

DOS prompt The signal that DOS uses to let you know that it is ready for you to tell it what to do.

DOS Shell A program that lets you work with files, organize and start programs, and switch between programs.

DOSSHELL The DOS command that starts the DOS Shell program.

drive, active *See* active drive.
drive, current *See* current drive.
drives, change *See* change drives.

E

ECHO A DOS command used mainly in batch files to turn the command echoing feature on or off, or to display a message.

edit text To insert, replace, cut, copy, paste, and delete text in DOS Editor.

EDIT The DOS command that starts the DOS Editor program.

editing window The work area in DOS Editor. The *editing window* is 256 characters wide, while most monitors display a screen width of about 80 characters.

error message A message that DOS displays on your screen when it does not recognize what you have entered.

executable files Files that do a task (programs files, external DOS commands, or batch files). *Executable files* end with .EXE, .COM, or .BAT. *See* batch files, external DOS command, program files, and search path.

expand all directories To display all the directories on the disk when in DOS Shell.

expand directories To display unseen subdirectories in DOS Shell. Directories that can be *expanded* have a plus (+) on their *directory icon* .

expand directory branch To display all directory levels under the selected directory in DOS Shell.

external DOS command A DOS command that is stored in a file and that is accessible only if it can be reached on the disk and directory on which it is stored. *See* internal DOS commands.

F

FASTHELP (DOS 6 only) The DOS command that provides *fast* information about DOS commands.

file, .DAT *See* .DAT file.

file A *collection of data* that is given a *filename* and stored on a disk.

file, batch *See* batch file.

file, data *See* data file.

file, overwrite *See* overwrite file.

file, program *See* program file.

filename The name you assign to a *collection of data* that you save on a disk.

filename extension The *optional* "period and up to three characters" at the end of a *filename*.

filename pattern A combination of *characters* and *wildcards* that represents a group of files.

files, executable *See* executable files.

files, hidden *See* hidden files.

files, hidden system *See* hidden system files.

files, organize *See* organize files.

files, transfer *See* transfer files.

find files (DIR/S) To locate files when you know the filename but do not know what directory they are in.

find text To search for specific text in a text file when using DOS Editor.

firmware *System software* that is built into the computer system on ROM chips. *See* read-only memory (ROM).

floppy disk A magnetically coated disk on which information can be stored and retrieved. Floppy disks are inserted into and removed from a floppy disk drive.

floppy disk drive A storage device that retrieves and stores files on removable media called floppy disks.

floppy disk size Floppy disks come in two sizes: 3½" and 5¼".

FORMAT The DOS command that prepares a disk for use by the computer.

four small command parts Space, colon, slash, and backslash. *See* three main command parts.

G

graphics display The display mode in DOS Shell in which many elements are displayed graphically. An element that is represented graphically is called an *icon*. Not all monitors support *graphics* display.

H

hard disk A large-capacity storage area that is built in to your computer and offers fast storage and retrieval. Also called fixed disk.

hard disk drive A built-in storage device that has a non-removable disk (a fixed disk) with a large-capacity. Hard disks provide fast retrieval and storage of files.

hardware The physical parts of your computer system—processor, memory, disks, disk drives, keyboard, monitor, etc. Hardware can be seen and touched.

HELP (DOS 5) The DOS command that provides information about DOS commands.

HELP (DOS 6) The DOS command that starts the Help program that provides in-depth help with DOS commands.

hidden files Files that are given the "hidden" attribute. The DOS attribute command, ATTRIB, is not covered in this book.

hidden system files *System files* that DOS puts on a *system disk* when you use the SYS command. You cannot see or access them, but they are there and they take up space. DOS 5 puts *hidden system files* at the beginning of the disk and will bump files that are stored at the beginning to a new location.

highlight To select an item or text in DOS Shell or DOS Editor, causing it to be displayed in a different color or in reverse video (the foreground and background colors are opposite the normal screen colors). *See* select text.

I

icon A small picture that represents an element such as a disk drive, directory, or file in DOS Shell.

inactive command A command in DOS Editor that cannot be used in the *current* situation. The letter which usually activates the command is not bolded when a command is inactive.

insert cursor A blinking *line* (in DOS Editor) that tells you where the next character you type will be displayed. *See* replace cursor.

insert text To use the *insert cursor* in DOS Editor so that the text you type at the cursor pushes the existing text to the right and down. *See* insert cursor.

internal DOS commands DOS commands that are stored in a file called COMMAND.COM and automatically loaded into the computer's memory. Because they reside in memory, you can execute internal commands at any time.

J

jump An item in the Help program that is enclosed in *angle* brackets, for example, <DIR>.

K

keyboard A device that is used to enter data into and issue commands to the computer.

L

LABEL The DOS command that creates, changes, or removes a disk's name (volume label).

line/space counter A gauge that tracks the cursor in DOS Editor.

list box A box in a dialog box that provides a list of options from which one item may be selected. (Used in DOS Shell and DOS Editor.)

M

major version changes When a company makes *major* changes (upgrade) to a program, they change the *whole number* part of the version number. *See* minor version changes, VER, and version.

MD (make directory) The DOS command that creates a directory.

memory The area of the computer that holds instructions (programs) and information you give it. When you turn the computer off, everything in memory disappears. Also called main memory or random access memory (RAM).

menu A list of commands from which you may *choose* (in DOS Shell and DOS Editor).

menu bar The horizontal bar across the top of the DOS Editor and DOS Shell screens that displays menus.

minor version changes When a company makes *minor* changes (revision) to a program, they change the *decimal* part of the version number. *See* major version changes, VER, and version.

monitor A screen that displays the information in the computer. Also called display screen and video display terminal (VDT).

MORE The "pipe" command which displays one screenful of output at a time. *See* pipe.

mouse A small, hand-held device you use to control a pointer on the screen.

mouse pointer (DOS Shell) A small rectangle (▒) (in the *text* screen) or an arrow icon (↖) (in the *graphics* screen) that moves with the mouse as you slide the mouse over a flat area.

mouse pointer (DOS Editor) A small rectangle (▒) in DOS Editor that moves with the mouse as you slide the mouse over a flat surface.

MOVE The DOS command that moves files from one directory to another directory or renames directories. This feature is available only in DOS 6.

O

option buttons Circles next to items in a dialog box from which you may select *only one item of a related group*. (Used in DOS Shell and DOS Editor.)

organize files To use filenames, filename extensions, and directories to arrange your files.

output The *results* of your DOS command, normally displayed on the screen.

overwrite a file To replace the contents of one file with the contents of another file.

P

parameter, destination *See* destination parameter.
parameter, source *See* source parameter.
parameters, date *See* date parameters.

parameters Parameters define the object you want DOS to act on, usually: a disk drive, a directory, a file or group of files, or a combination of the above.

parameters, time *See* time parameters.

parent directory The directory immediately above the *current* directory (or immediately above any particular subdirectory). *See* subdirectory.

paste text To copy text from the *buffer* into a text file (in DOS Editor). *Paste* leaves the original text in the *buffer* so it can be pasted again and again (until you cut or copy other text). *See* buffer.

path The list of directories that DOS goes through to find a directory or file.

PATH The DOS command that sets a search path for executable files.

PAUSE A DOS command used in batch files to temporarily stop a batch file and prompt the user to press any key to continue.

pipe The process in which the *output* of one command (or program) becomes the *input* for another command (or program). *See* MORE.

printer A device DOS sends data to so that it can be printed.

PRN DOS's name for the printer, it is used, along with the redirect symbol (>), to redirect the computer's output to the printer. *See* redirect output to the printer.

processor (CPU) The part of the computer that processes the instructions that are in memory.

program (application) A set of instructions that your computer carries out to perform a specific task, such as word processing. Programs are saved as files with filename extensions of .EXE (executable files), .BAT (batch files), or .COM (command files).

program file A file that holds a *set of instructions* that perform a task, such as word processing or database management. This is the DOS Shell icon that represents a *program file* ▭.

program group ▭ A name in the *Program List area* of DOS Shell which opens a list of additional programs that are not displayed originally. Program groups are similar to a *sub-menu* which contains additional options.

program item ▭ A *program file* listed in the *Program List area* of DOS Shell.

Program List area The area of DOS Shell that is designed with features that let you organize *program files* called *program items* into groups called *program groups*.

prompt, access DOS *See* access the DOS prompt.
prompt, active DOS *See* active DOS prompt.
prompt, common *See* common prompt.
prompt, default *See* default prompt.
prompt, DOS *See* DOS prompt.

PROMPT The DOS command that changes the appearance of the DOS prompt.

R

RD (remove directory) The DOS command that deletes a directory.

read-only memory (ROM) A chip that holds information that cannot be changed. *See* firmware.

redirect output to the printer To use a code to tell DOS to send the *output* of your command to the *printer* rather than the *screen*. *See* PRN.

redirect To change (redirect) the place a command *gets information from* or *sends information to*.

REM (remark) A *batch file* command that lets you add a comment to a batch file without affecting the way the batch file runs. You can also use REM to temporarily disable a command in a batch file.

REN (rename) The DOS command that changes a file's name.

repeat a command To use F3 to quickly reproduce the previous DOS command.

replace cursor A blinking *rectangle* in DOS Editor that tells you where the next character you type will be displayed. *See* insert cursor.

replace text To use the *replace cursor* in DOS Editor so that the text you type at the cursor overwrites the existing text. Also, overstrike or overwrite. *See* replace cursor.

root directory The main, first-level directory on a disk. The root directory is represented as a backslash (\) in the path, and as A:. in the TREE command.

run a program To load a program into the computer's memory and start it.

S

scroll arrow The arrow at each end of a scroll bar, used to *scroll* through the contents of a window in DOS Shell or DOS Editor.

scroll bar A *bar* that may appear at the right and/or bottom edge of a window (or right edge of a list box) that allows you to scroll the window (or list box) when its contents are not fully visible. Each *scroll bar* contains two *scroll arrows* and a *scroll box*. *See* scroll arrow and scroll box.

scroll box A small box in a scroll bar that shows the position of the information *displayed* in a window in relation to the *entire contents* of the window.

scrolling The vertical movement of files on the screen.

search path A list of directories set by the PATH command that DOS looks through to find an *executable* file. *See* executable file.

select areas Move to different areas in the DOS Shell screen, causing that area's title bar (or drive icon) to be highlighted.

select directories To highlight a directory in DOS Shell.

select text To use the keyboard or mouse to highlight text in DOS Editor. *See* highlight.

select To pick an area (in DOS Shell) or mark an item (in DOS Shell or DOS Editor) so that a subsequent action can have an effect on the area or item. *See* choose.

serial number A number that DOS assigns to a disk when it is formatted. The serial number cannot be changed unless you reformat the disk.

shortcut keys Easy-to-use key combinations that activate certain commands instead of using menus in DOS Shell or DOS Editor. If a menu option has a *shortcut*, the key combination is shown to the right of the command on the drop-down menu.

software Instructions that tell your computer how to perform a task. Software is stored on disks in program files. Software cannot be seen or touched. There are two main kinds of software, *application software* and *system software*. *See* application software and system software.

source disk The disk to copy from when doing a DISKCOPY. *See* target disk.

source parameter Defines the location of data to be transferred to a specified *destination*. A *source parameter* can consist of a drive letter and colon, a path, a file or group of files, or a combination of drive, path, and file. *See* parameters and destination parameter.

status bar The horizontal bar across the bottom of the DOS Editor screen that displays common commands that are available in the current situation and a line/space counter on the right end when relevant.

subdirectory A directory that is within another directory.

subdirectory switch (/S) A switch used with the DIR command that tells DOS to look not only in the *current directory*, but in every directory *under* the *current directory* when it lists files. If you are in the *root directory*, DOS will search in every directory on the disk.

switch An optional code at the end of a command that directs the command to vary its task in a specific way.

switch option An optional code at the end of a *switch* that begins with a colon (:) and provides information that changes a *switch* in a specific way.

syntax The *language* of DOS commands.

SYS The DOS command that copies DOS system files and COMMAND.COM to a disk you specify, making the disk a system (bootable) disk.

system disk A disk that contains the *system* files needed to start up or *boot* the computer. Also, bootable disk.

system software Software that runs the computer system.

T

target disk The disk to copy to when doing a DISKCOPY. *See* source disk.

Task Swapper A DOS Shell feature that lets you run two or more programs at the same time and switch between them.

text box A box in a dialog box that provides space to type the information needed to carry out a command. (Used in DOS Shell or DOS Editor.)

text display The display mode in DOS Shell in which information on the screen is displayed without using *graphics*. For example, a disk drive is represented as [A:] instead of 🖴A. All monitors support *text* display, while some monitors do not support *graphics* display.

text editor A program that operates in *ASCII file format* and that you use to create and edit *unformatted text files*. *See* ASCII and unformatted text files.

three main command parts Command name, parameters, and switches.

time parameters The objects you want DOS to act on in the *TIME command*, that is, the hour, minutes, seconds, hundredths of a second, and AM or PM.

TIME The DOS command that displays or changes the computer's time.

transfer files To move files from one directory to another directory and remove the files from the original directory. DOS 6 users can use the MOVE command to transfer files, while DOS 5 users must first COPY and then DELete files.

TREE The DOS command that displays the directory structure of a disk.

TYPE The DOS command that displays the contents of a file.

U

UNDELETE The DOS command that restores files that have been deleted.

unformatted text files Files that contain only ASCII text characters (letters, numbers, and symbols) and a few codes such as a *carriage return*. Unformatted files do not contain formatting codes such as *underline* or *bold*. *See* ASCII and text editor.

V

VER (version) The DOS command that displays DOS's name and version number.

verify switch (/v) An optional addition to the DISKCOPY command that tells DOS to compare the source and target disks during the copy.

version The numbering plan that identifies software revisions and upgrades. Version numbers have two parts: a whole number and a decimal. *See* major version change and minor version change.

volume The term used by DOS to represent a disk when giving it a name (label).

VOL (volume) The DOS command that displays the disk's volume label (if it exists) and serial number.

volume label A name you assign to a disk.

W

warm boot The process of *restarting* the computer by simultaneously pressing Ctrl, Alt, and Del instead of using the on/off switch.

whole word The Search mode (in DOS Editor) in which Search looks for text that has spaces (or punctuation or certain symbols) on either side of it.

wildcards Symbols that stand for *any* single character (?) or *any* group of consecutive characters (*) in a DOS command.

write-protect To use a procedure that will protect a disk from being changed in any way while still allowing you to read the information on the disk.

write-protect tab A small, self-adhesive tab that often comes packaged with disk labels and is used to cover the write-enable notch on a 5¼" floppy disk.

X

XCOPY The DOS command that copies all the files (except hidden and system files) in a directory or in an entire directory branch.

Y

you (user) The controller of the computer system (its software and hardware).

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DOS Keyboard Commands

F3	*Repeat last command*
F1	*Repeat last command one character at a time*
Del	*Delete character cursor is on*
BkSp	*Delete character to the left*
Ctrl + C	*Stop a DOS command*
Ctrl + S	*Pause a DOS command (scroll)*
Ctrl + Alt + Del	*Warm boot computer (restart computer)*
Caps Lock	*Toggle CAPS on/off*
Num Lock	*Toggle keypad between number and cursor movement keys*
Prnt Scrn *or* Shift + Prnt Scrn	*Print contents of screen*

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